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An Address
ON
SOME GENERAL CONSIDERATIONS REGARDING THE RELATIONS OF THE MEDICAL PROFESSION AND THE PUBLIC.

Delivered to the Ulster Medical Society on March 6th, 1913,

BY JAMES ALEXANDER LINDSAY, M.D. R.U.I., F.R.C.P. LOND.

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GENTLEMEN,—Our secretary has laid upon me the onerous task of submitting to you some general considerations regarding the relations of the medical profession and the public, a task which I would not have ventured to undertake unsolicited, and to which I address myself with unfeigned diffidence. I am informed that some of our members think that the present time of conflict and uncertainty, when our profession is the object of so much ill-informed and ungenerous criticism, is a suitable opportunity for reconsidering our responsibilities, duties, and privileges. It is sometimes salutary to hark back to first principles and to inquire what help they afford in dealing with the difficulties of the hour.

THE NATIONAL INSURANCE ACT.

The Insurance Act, which is now the law of the land, and not likely to be abrogated, has had a difficult nativity and its share of infantile disorders. Whether it will ever attain to a thoroughly healthy maturity I shall not attempt to predict. Experience upon the point in Germany is not altogether reassuring. But one thing is certain. The Insurance Act is bound to have far-reaching effects for good or for ill upon the status, dignity, and usefulness of the medical profession. A large majority of our brethren have become, or are about to become, State servants, in receipt of State pay, and owing obligations to the State. In future they will have to acknowledge a threefold obligation—to their patients, an obligation which is primary and fundamental for us all; to their profession and their medical brethren; and to the State in its corporate capacity. The controversies which have raged round the Insurance Act have been to many of us painful and disquieting. They have too often shown a singular lack of appreciation of professional rights and professional honour, and a niggardly recognition of the value of medical services. The work of safeguarding the public health and fighting the battle against disease—a work certainly as honourable and indispensable as that of administering our laws or providing for the national safety—has been the object of much misrepresentation and ill-timed satire. Our critics have not always stopped to inquire whether their own contribution to the labours of the nation will bear comparison with that which they have belittled and impugned. Politicians have argued as if you could contract for medical service as you contract for the supply of milk or potatoes, forgetting that the one indispensable thing in a medical contract is to secure the good-will of the doctor and to have an assurance that the best that is in him, the best of his knowledge, energy, and skill, will be ungrudgingly devoted to his patients' welfare. A reluctant medical service will always be a bad medical service. Men smarting under the sense of compulsion or injustice cannot in the nature of things be expected to give their best to duties which are believed to involve unnecessary hardship. I do not affirm that all sense of injustice may not yet be removed, but I do confidently affirm that if the State wishes to be well served by the doctors it must treat them with respect and consideration, and not only secure but deserve their cordial coöperation.

UNQUALIFIED MEDICAL PRACTICE.

Another disquieting sign of these days was afforded by a recent controversy in the columns of the *Times* on the subject of quackery. In the course of that correspondence it was laid down by various authorities, more or less eminent, that if anyone could prove his capacity to cure, whether as a bone-setter or the possessor of some new drug, he had as good a right to practise medicine as any legally qualified practitioner, and that it was persecution and rank professional jealousy for the medical profession to refuse recognition and professional courtesies to such persons. The reply to this contention is very simple. The possession of a medical qualification is a guarantee that its possessor has spent several years in the studies of his profession, that he has some knowledge of the ancillary sciences, that his acquaintance with anatomy, physiology, chemistry, and materia medica will go far to preserve him from elementary errors, and that he has observed disease in hospital sufficiently long and sufficiently well to have a fair knowledge of the true nature, the probable course, the dangers, and the suitable management of the maladies entrusted to his care. Under none of these heads has the public any guarantee as regards the quack. Natural dexterity or happy chance may enable him to reduce a dislocation or set a fracture which has baffled the surgeon, but he is even more likely to do harm. He may make a lucky hit in the field of medicine, but as he is ignorant of pathology, and his diagnosis is mainly guesswork, it is evident that his intervention may be fraught with serious risk to the patient. The British laws are very tolerant of irregular medical practice, much more tolerant than the laws of most civilised countries. In the field of medical practice there still lingers in the public mind something of the *laisser-faire* spirit of the now discredited Manchester school of politicians. *Caveat emptor* is a favourite maxim with the British people. The vague idea that, as we are a free nation, it is an infringement of public liberty to check irregular medical practice is widespread. But it is a shallow and short-sighted conception. The State which protects us against adulterated foods has no right to permit the sale of powerful and often poisonous drugs under some specious and high-sounding designation. Granting the right of the public to drug itself at its own option, the State in this country should follow the example of most other civilised states and insist that the public shall know what it is buying.

It is not, however, to such obvious matters that I conceive I am requested to direct your attention, but rather to some of those ultimate principles which must regulate the relations of our profession to the public, if those relations are to be mutually satisfactory, if the prevention and cure of disease are to be successfully promoted, and if the interests of medical science are to be conserved. Just as the wise administration of the law is a matter not of mere professional interest but of fundamental national importance, so the cultivation and successful practice of medical science is a matter which concerns not the medical profession only, not our nation only, but our common humanity. For life, work, and happiness nothing is more essential than health. No interest is more vital to the State than the physical well-being of its inhabitants. If the practice of medicine is not wisely regulated, if it is not accorded due recognition and adequate reward, if it is harassed by unwise legislation, if it ceases to attract the best minds to its service, it is the public, the nation, which in the long run will suffer.

A GLANCE AT THE HISTORY OF MEDICINE.

It may not be amiss to begin our survey by a glance at the past. The history of medicine, which is far too little studied, is full of instruction for us. We are apt to underrate the achievements of our remote predecessors in the field of medicine, and to imagine that where there was little science there could be no successful art. But the history of medicine in Mesopotamia, in Persia, in Egypt, and, above all, in Greece, shows with what zeal and insight the phenomena of disease were studied in early ages, and how many wise and successful methods of treatment were in operation. The history of medicine may be compared to two parallel currents. One current begins in magic and sorcery, passes through priestcraft, and ends in science. The other current is that of empiricism, which flows parallel to the first current, and sometimes rivals or surpasses it in volume and in strength. Primitive man attributed disease to demonic power; treatment was conceived as a contest between opponents, each wielding the weapons of sorcery; magic had to be encountered by magic. In this stage of development the medicine man and the witch doctor represented the art of healing. At a later stage the conceptions of sacrifice, propitiation, purification, fumigation, fasting, &c., make their appearance, and the

doctor becomes identical with the priest. This combination of medical and sacerdotal functions had a wide range and a long vogue, and seems to have attained its maximum development in Egypt about 2000 years B.C. The physician belonged to the priesthood, medicine was taught in the temple schools, the god Thoth was the patron of our art, medical practice was largely theurgical, great stress being laid upon elaborate ritual, charms, ablutions, and various hypnotic or suggestive devices. Greece, to which we owe so much that is best in our civilisation, seems to deserve the honour of being the first to evolve the lay physician—the man devoted to the study and cure of disease, specially trained for the task, and accorded social consideration and substantial reward. It is true that in Greece the sacerdotal conception of medicine lingered long, that the temples of Æsculapius were practically hospitals, and that temple practice and superstitious ideas played a large part in the life of the people. But the spirit of Greece was essentially a lay spirit; the scientific instinct awoke early, and it was the great good fortune of Greek medicine to find in Hippocrates one of the greatest minds of all time. His works still repay study. He was a close observer, an acute clinician, and a practical therapeutist. His views upon the importance of diet, exercise, gymnastics, massage, and hygiene were sound and wise. In the great days of Greece the physician seems to have enjoyed a position of considerable repute and affluence, and the Hippocratic tradition was held in just honour. Amongst the Romans the position of medicine was less honourable. Medical practice was largely in the hands of Greeks, who were often freedmen and slaves, and it shared in the general discredit attaching to these classes. But there were exceptions. The great Galen, whose writings were destined to dominate medical thought and practice for a thousand years, enjoyed an immense repute, and had emperors for his friends and patients. Amongst the Arabs, both in the East and in Spain, medicine held a high place, and in particular pharmacy made great progress. It is not, however, until the tenth or the eleventh century that at Salerno we seem to mark the beginnings of modern medicine. Here there was a flourishing medical school, of which the origin is very obscure, a recognised course of study, and something of the nature of a diploma or testamur. Medicine won its way to recognition slowly in the mediæval universities. The Universities of Bologna, Paris, and Oxford devoted themselves almost exclusively to the study of theology, philosophy, and law. The conception of science—i.e., of the orderly interrogation of nature and the systematic employment of observation and experiment, which was familiar to Aristotle—was almost lost in the Middle Ages, although we detect its obscure strivings in the writings of that enigmatical figure, the great Franciscan monk of Oxford, Roger Bacon, whose fame has been unjustly dimmed by that of his better-known namesake. The repute of medicine grew but slowly as the modern epoch advanced. Even Harvey's great discovery was imperfectly appreciated. Molière's comedies show the low esteem in which the medical practitioner was held in one of the most brilliant periods of French history. Nor is this surprising. Medical practice remained crude and unscientific; there was no sound pathology; blood-letting was the universal panacea; surgery was a mere mechanical art. Jenner's discovery opened a new era, and henceforward progress was rapid and continuous. The great discoveries of the nineteenth century in the physical and biological sciences had their counterpart in the field of medicine. A long array of famous names, culminating in those of Pasteur and Lister, are the landmarks of a progress which has revolutionised medicine and surgery and opened up new hopes for humanity. And this progress in discovery has had as its natural correlative a higher repute and an improved status for the medical practitioner and for medical science. Yet that status still leaves much to be desired. We are still much under-represented in Parliament. The House of Lords, where the law, the Church, the army, and the navy are so generously represented, contains at the moment no representative of medicine. We have no Cabinet Minister entrusted, as in Japan, with the oversight of the public health, although we have a Minister to look after our letters and another to supervise our farmers. We are very inadequately represented in the lay press, which pronounces upon medical questions with a confidence not always founded on knowledge. Recent controversies have shown that medical opinion can be flouted and over-ridden. Whence come our present confusions and discontents? Why is there so much unsettlement, apprehension, and insecurity? Why are we compelled, often reluctantly, to be so much upon our defence? The answer, I think, is that we are passing through a period of transition, that many of the old landmarks are submerged while the new landmarks are not yet visible, that the present age is critical of the doctors as it is critical of the politicians and even of the theologians—in a word, to employ a useful evolutionary figure, that we are not yet adapted to our new environment.

Let us ask and strive to answer two elementary questions—viz., (1) What is the true function of the doctor in the modern state? and (2) what are the indispensable conditions of satisfactory medical practice at the present day?

WHAT IS THE TRUE FUNCTION OF THE DOCTOR IN THE MODERN STATE?

The time is past when it would have been sufficient to answer that it is the sole business of the doctor to cure, or relieve, suffering and disease. The importance of preventive medicine is now universally recognised. The public are fully aware that prevention is not only better but cheaper than cure. We are all sorrowfully alive to the fact that a good deal of our time and energy is absorbed, both in hospital and private practice, by the wrecks of humanity, by cases where a good result is in the nature of things impossible. Plato advised physicians not to waste time over cases which they could not cure, but that is not a possible position to-day. Now, it is one of the anomalies of the present day that preventive medicine is so largely handed over to a special class amongst our profession, and one relieved from the cares and responsibilities of ordinary practice. But we are beginning to hear a demand that the ordinary practitioner of medicine should recognise preventive work as part of his habitual duty. The compulsory inspection of school children, which England in somewhat belated fashion has adopted and Ireland, to her sorrow, still neglects, is a step in this direction. The result of such inspection has been to throw a lurid light upon the amount of disease and defect which was previously neglected. In round numbers 90 per cent. of school children have dental defects, 30 per cent. have adenoids or enlarged tonsils, 10 per cent. have visual defects, and 1 per cent. are feeble-minded. It is an interesting subject for speculation as to what results would emerge if the adult population were subjected to a similar examination.

But how is the practitioner to exercise any preventive function? How can he give his advice until it is asked for? At present it is very seldon asked for except in case of real, or imagined, illness. A good many people visit their dentist once a year as a matter of routine to be assured that their teeth are in order or to have any necessary repairs effected in good time. How many people visit their doctor once a year, or even at much longer intervals, to ascertain whether organs more important even than the teeth are bearing the stress and strain of existence? How many cardiac valves go their way to complete inefficiency when a little timely warning might have stayed the process of disorganisation? How many cases of incipient phthisis are allowed to drift on from the curable to the incurable stage? How many livers progress to incurable cirrhosis when a hint in time from the doctor might at least have delayed the hardening process? How many cases of Bright's disease or of diabetes are allowed to become formidable when early treatment might have been efficacious? The subject opens up vast vistas. In some of the German cities it is becoming usual for persons to obtain a health schedule, filled up by some qualified practitioner, setting forth the state of the various organs and of the general health. These schedules are not obtained necessarily for the purpose of life assurance, but on general grounds, and are found useful in many ways. Even candidates for matrimony sometimes find the possession of such a schedule advantageous. It is clear that those persons who think that at present the medical practitioner does too little in the way of prevention have the matter largely in their own hands. If they will but give him the opportunity, it is probable that it will often be in his power to give warnings or to suggest cautions which may prevent much mischief. Especially does the periodic examination of children suggest itself as a necessary and

prudent step. Amongst the common incidents of childhood which often escape recognition until irreparable mischief is done we might signalise the slighter manifestations of rheumatism, obscure affections of the throat, incipient spinal caries, ill-marked chorea, defects of sight and hearing.

Another complaint which is sometimes preferred against our profession in these days is that it does too little in the way of instructing the public in the laws of health. The word "doctor," we are reminded, means "teacher," but the medical practitioner, it is affirmed, does little or nothing in the way of teaching. He practises and heals, but he does not teach. He is supposed to regard medical knowledge as the province and perquisite of his profession, not to be properly or usefully shared with the laity. I think there is some truth in these allegations, but it may be replied that there never was a time when medical men, often at the cost of much inconvenience and even some material loss, gave so much attention to educational work. If the public remains ignorant of the elementary laws of health and the primary precautions against disease, it is not from lack of popular lectures, articles in the magazines, and the circulation of cheap literature, often good of its kind. Our profession does much at the present day to inform the public and to spread enlightened views, and does it often at the cost of some misunderstanding and misrepresentation. But this work must go on, and is undoubtedly destined to assume larger proportions. The public press is more interested than ever before in questions of hygiene and public health. The great work of preventive medicine accomplished in Uganda, Western Africa, Cuba, and Panama has captured the public imagination. Now it may be fairly asked, how far is this process of popularising medicine to be carried? Does it not involve some risk both to the public and to the medical profession? Can the line be drawn between discussions and contributions which are likely to be fruitful and wholesome and those which may be mischievous both to the public and to ourselves? I think that line can be drawn. The natural functions of the body, the laws of physiological health, sanitation, hygiene, the regulation of trades, the inspection of schools, the dangers of city life, the means of rendering first aid in the case of accident or sudden illness—all these may be safely and rightly taught to the public. But when it comes to be a matter of the diagnosis and treatment of disease the lay press should be warned off from a field where it can have no real competence and where its intervention is sure to be mischievous.

Let me pass on to the second question which I have propounded for your consideration—viz.:

WHAT ARE THE INDISPENSABLE PRIMARY CONDITIONS OF SATISFACTORY MEDICAL PRACTICE?

In an article which I contributed to the September number, 1911, of "The Nineteenth Century and After" I propounded three principles to which medical practice should conform. These three principles were as follows:—(1) The patient, or his responsible relatives, should be free to select a practitioner in whose character and skill he or they have confidence; (2) the practitioner should give the case adequate time and attention at a scale of remuneration which satisfies him; (3) the relation of patient and doctor should be terminable on either side for adequate cause and subject to certain easily-defined limitations. These three principles seem to me to contain the pith of the whole matter, and we might get some assistance in dealing with our present difficulties by inquiring how far any proposed arrangements conform to them or to fail to conform to them. It is evident that over considerable areas of practice these conditions are fairly fulfilled. The patient gets the doctor of his choice, he pays him fees on some recognised scale, and he dispenses with his services when those services have ceased to be acceptable to him. But in contract practice these conditions are subject to some inevitable limitations. The patient's choice of doctor is not absolutely free, the scale of remuneration too often gives just cause for dissatisfaction, and the severance of professional relations, when those have become strained, is not immediately practicable. My point is that in so far as contract practice approximates to the three specified conditions just to that degree it will work smoothly and successfully. In so far as it departs from them will it be a failure, and a failure, be it noted, just as much from the point of view of the patient as from that of the doctor. How far the National Insurance Act can be worked to secure these three conditions it is, perhaps, premature to express any opinion. It is certain that our legislators would have acted more wisely if, before launching this great scheme, they had taken the precaution of ascertaining whether the conditions which they were prepared to offer were likely to be generally acceptable to the members of the medical profession.

CONSIDERATION OF PROPOSED NATIONAL MEDICAL SERVICE.

In the course of recent controversies there has emerged for the first time in any definite or concrete form the proposal for the nationalisation of the medical profession. It is suggested that doctors should be formed into a State Civil Service, that they should be distributed locally on some definite principle, receive a fixed salary and suitable pension, and discharge certain clearly defined duties. It is claimed that by such a system many existing evils would be mitigated or removed, that the labours of practice would be more evenly distributed, remuneration more fairly adjusted, a uniform standard for entrance into the profession secured, and unhealthy competition obviated. If these ends could be secured without serious dangers and sacrifices, the gain would undoubtedly be great. But the subject is surrounded by enormous practical difficulties. We have no precedents to guide us to prove the possibility of such a scheme. That all classes in any single area would consent to be served by the same doctor is an improbable assumption. Her ladyship might, without undue snobbishness, hesitate to discuss her ailments with the doctor who was in attendance upon her cook or her footman. The social difficulty looms large in view of any scheme for nationalising the medical profession, and we have no evidence that it could be successfully overcome. Further, we might reasonably entertain doubts where the large diminution of the element of competition which would be inevitable under such a scheme might not react injuriously upon professional competence and energy. Then there might be a serious question whether a State service, offering only moderate financial rewards and only a few great prizes, would attract men of the first intellectual capacity, who might probably aspire to a more brilliant career in other professions. Grave as are these difficulties and objections, it is not certain that they are absolutely final, and the whole question of a National Medical Service is one upon which it might be advisable to keep an open mind. I do not believe, however, that such a service will come in our day.

HOSPITAL ADMINISTRATION.

The last question to which I wish to direct your attention is the present state of our hospitals and the probable effect of the National Insurance Act upon that position. It must be admitted that our present system of hospital administration is in many respects most unsatisfactory. Magnificent work is being done, and our hospitals are one of the greatest glories of the age, but there is lack of definite and intelligent organisation, serious abuses exist, serious wrongs are inflicted both upon the medical practitioner and the charitable public, and efforts at reform have so far proved almost wholly futile. It is worth inquiring why this should be so. Our hospitals fall into five categories, viz.: (1) hospitals supported wholly or mainly by charitable contributions or investments from former benefactions. In this class are included the great general and special hospitals of our cities and cottage and other small hospitals scattered over the country. 2. Poor-law hospitals, rate-supported. 3. Municipal fever hospitals, rate-supported. 4. Lunatic asylums, rate-supported. 5. Consumption sanatoriums, supported partly by grants from Government and municipal contributions and partly by charity.

Now these five groups of institutions, all aiming at dealing with disease or mental incapacity, are practically independent of each other. Very different degrees of efficiency are attained. These institutions have no necessary bond of union, no combination for any form of coöperation, no system to secure mutual aid or prevent injurious competition or conflict of interests. It is true that the differentiation of function between these different types of institution follows to a large extent natural and inevitable lines, partly medical, partly economic. But it does seem extraordinary that so loosely articulated a system should still survive. It has grown up through the accident of circumstance, and has never undergone readjustment to the needs of the present

age. Perhaps the lack of intelligent and coherent system largely explains how it comes about that hospital abuse has proved so intractable and perplexing a problem. We have had committees of inquiry innumerable, some of the ablest men of the day have given willing assistance, but very little has been effected. May the explanation not be that we have never thoroughly thought out what hospitals should do and should not do, what their proper and equitable relation is to the sick, the charitable public, and the medical profession? Here, if anywhere, we need the guidance of first principles. These principles might, perhaps, be formulated somewhat as follows. Hospitals, and in particular our great general and special hospitals, in connexion with which the main difficulties arise, are intended to meet the medical and surgical needs of that large class which, not being paupers, is unable to bear the cost of treatment either in their own homes or in private nursing institutions. Hospitals are further intended to deal with such medical and surgical cases as the general practitioner cannot treat satisfactorily in their own homes. Two indications clearly arise from this definition of function. First, there should be an adequate investigation of the patient's means—that is the economic problem. Secondly, the general practitioner should not be deprived of patients whom he can treat to his own and the patient's satisfaction at their own homes—that is the professional problem. There can be no question that these two indications are at present very inadequately fulfilled. They are not even always clearly realised. But hard experience shows how great are the difficulties surrounding this subject. Even with the best intentions, an adequate inquiry into the means of patients presenting themselves for hospital treatment is a task of great difficulty. The pressure of work is great; the means of getting trustworthy information are not always readily or easily available. The almoner system is the best device so far suggested, and it should be universally adopted when possible. The second indication—viz., that the general practitioner should have more influence than he at present exercises in deciding who are suitable subjects for hospital treatment—should not be incapable of solution, although it undoubtedly involves delicate professional questions. On the one hand, hospital authorities have no right to do work which can be equally well done at the patient's house, and for which the patient can afford to pay. On the other hand, the general practitioner should not overlook the needs of the clinical teacher and the just claims of medical education, of which he is himself the product. He should remember that hospitals fulfil one of their noblest functions in providing a training ground for the doctor of the future.

How far it would be possible or equitable to introduce generally into these countries the practice which prevails widely elsewhere—viz., that a patient of any rank of society should have access to our hospitals and be at liberty to command the services at the usual fees, either of a member of the staff of such hospitals or of his own private medical attendant—is a question upon which medical opinion seems to be much divided. Our cottage hospitals already recognise this principle, and in their case it seems to work successfully and without friction. There seems no clear or final reason why this principle should not be made more widely applicable. It would certainly meet the needs and gain the approval of a considerable section of the public, who at present are somewhat puzzled to see all the splendid administration of our great hospitals at the service of their housemaids or men servants, but withheld from themselves, even when they are quite prepared to pay the full price for such benefits.

HOSPITALS AND INSURED PERSONS.

The relation of insured persons under the Act to hospitals has raised the most difficult question with which our profession has been confronted in our time, and we see how much perplexity it has caused. And here, as throughout this address, I suggest that we should refer a temporary problem to first principles. The State has made a bargain with insured persons to guarantee treatment for them in case of sickness or injury. It will be forced to interpret this bargain so as to include hospital treatment, and the problem is whether such treatment can be given by our voluntary hospitals as at present organised. Will the charitable public continue to subscribe funds for the treatment of insured persons—treatment for which the State has made itself responsible? Will the medical staffs of such hospitals feel bound to give gratuitous service to the beneficiaries of the State? These are most anxious questions which have not yet received any definite or satisfactory reply. It would seem almost inevitable that the State should be compelled to provide its own institutions for the hospital treatment of insured persons, and pay the staffs of such institutions—a solution which I confess I contemplate with not a little apprehension, especially from the point of view of medical education.

It is much to be desired that the present crisis should find some solution consistent with the maintenance of the just rights of the medical profession—rights which are often infringed both in hospital administration and in private practice—without the sacrifice of its reputation as a benevolent and unselfish profession, a reputation which it, upon the whole, enjoys, and which, we may humbly hope, it, upon the whole, deserves. But my time is exhausted and I must bring these discursive observations to a close. They are designed less to express my individual opinions than to stimulate thought and initiate discussion.

THE EFFECT OF GENERAL CONTRACTION OF THE PERIPHERAL BLOOD-VESSELS UPON MOUSE CANCERS.

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Wassermann[1] and Neuberg, Caspari and Löhe[2] describe the liquefaction and final disappearance of tumours produced by inoculation in mice. This result is obtained by the intravenous injection of various highly toxic materials. In Wassermann's case the "compound" is one of selenium and eosin. The theory of the treatment is based upon Ehrlich's statement that tumour cells possess a much greater avidity for oxygen and nourishment than do the cells of normal tissue. Neuberg and his collaborators have worked with compounds of cobalt, silver, copper, platinum, gold, and tin, obtaining the best results with the two first. The theory in this case is that the cells of malignant growths possess the peculiar characters of rapid growth and degeneration, which characters are due to the presence of certain abnormal enzymes. The substances used are supposed to act only in the presence of these abnormal enzymes, and to increase the degenerative process to such an extent that the tumour cells are destroyed.

In the case of all these experiments the useful dose of the "compound" is nearly as great as that which kills the animal outright, and must be injected directly into the circulation. So nearly the lethal dose must be used that the mortality is as high as 70 per cent. None of these investigators have given any definite information as to the constitution or manner of preparing the "compounds" they have used. The compounds are, however, generally stated to be unstable.

The immediate effect of the "compounds" injected by Neuberg and his collaborators is described as a contraction of the blood-vessels of the body and a dilatation of those of the tumour. The animal's body is generally blanched, but in the tumour the dilatation is so great that extravasations of blood visible to the naked eye are numerous. In Wassermann's experiments the injection of the selenium-eosin preparation is described as turning the mouse pink all over immediately, but the pink coloration disappears rapidly from the body and is concentrated in the tumour. These facts seem to suggest that the action of the preparations under consideration may possibly be to some extent mechanical and not due to any selective action upon the tumour cells. There is no nerve-supply to malignant growths, and in these mouse tumours the vessels generally possess walls of a single layer of cells. Even in the larger vessels it is highly improbable that the nerve-supply is as efficient as it is in normal blood-vessels.

[1] Beiträge zum Problem: Geschwülste von der Blutbahn aus therapeutisch zu beeinflussen, Deutsche Medicinische Wochenschrift, December, 1911.
[2] Weiteres über Heilversuch an Geschwülstranken Tieren mittels tumeraffiner Substanzen, Berliner Klinische Wochenschrift, July, 1912.

The dilatation and contraction of blood-vessels is controlled by the nerves, and hence it is possible that when these poisonous substances are introduced into the circulation the immediate result is the contraction of the blood-vessels generally, excepting, of course, those in the tumours, through their action upon the nervous system. The blood-vessels and spaces in the tumour, owing to the increased pressure produced by the contraction of the vessels of the body, are passively dilated. The poisonous compounds, having been introduced directly into the blood stream, would thus act far more upon the tumour cells than upon those in the body generally, and as they are described as being very unstable they would tend to break down before the blood-vessels of the body again dilated. The doses that are effective in destroying the tumours are very nearly the certainly fatal dose. It is reported that in the very few cases of spontaneous tumours in animals upon which these preparations have been tried, effusions of blood and softening have occurred, but no cures have been obtained. It has been explained elsewhere that the tumours produced in mice by grafting become surrounded by a strong capsule of inflammatory tissue before proliferation begins among the tumour cells, so that these tumours are cut off from the body of the animal in which they grow in a manner which does not occur in a primary spontaneous cancer.[3] This would very probably confine, to some extent, the poisonous compound to the tumour after it had been collected there through the contraction of the blood-vessels of the body generally and the concomitant dilatation of the blood-vessels and blood spaces of the tumour. That the blood-vessels of spontaneous tumours should be passively dilated in the same manner is what might be expected, but in such cases there is lacking that isolation of the tumour cells which must form so useful a factor in success when the curative and lethal doses are so very nearly balanced as they are in the experiments quoted here. It has also been pointed out elsewhere that these graftable mouse cancers have acquired some of the characters of separate individuals not possessed by primary malignant growths, through the process of selection necessarily involved in their continued propagation.[4]

Acting in accordance with the idea here put forward, we injected mice, in which tumours had been produced by grafting, with various substances which produce a rise in the blood pressure and a contraction of the vessels in the body generally. The two substances with which the best results were obtained were "ernutin," a preparation made from ergot by Burroughs, Wellcome, and Co., and pituitary extract.

The following results were obtained with "ernutin." Seven mice were injected with 0·006 c.c. of ernutin intravenously. The later injections in almost every case were given hypodermically, as the caudal vein, the only vein available in the mouse for the purpose, often became thrombosed after several injections. In the case of hypodermic injections 0·009 c.c. of ernutin was given. The injections produced blanching of the whole body in a few minutes in some cases, in others not until about 15 minutes had elapsed. This blanching lasted for about an hour and a half. The tumour did not blanch. Fourteen mice were kept as controls. The average size of the tumours was 12 × 10 mm. Of the treated mice, No. 1 received 4 injections. No hæmorrhages were found in the tumour when the mouse was killed. No. 2 received 4 injections. Hæmorrhages were found under capsule and in centre of tumour, and a small cavity near the centre. No. 3 received the same as No. 2. No. 4 received 8 injections. Hæmorrhages under capsule only. No. 5 received the same as No. 4. No. 6 received 9 injections. No hæmorrhages, tumour smaller. No. 7 received 9 injections. The tumour was very hæmorrhagic, particularly under capsule. There was a considerable cavity filled with blood in the middle of the tumour. The tumour was a little smaller. In the 14 controls no hæmorrhages were found, but two got smaller.

With pituitary extract the following results were obtained. Five mice were injected intravenously with 0·01 c.c. of pituitary extract (Burroughs, Wellcome, and Co.) in the same manner as with ernutin. When subcutaneous, the injection was 0·02 c.c. The mice blanched more rapidly than with ernutin, and the blanching did not last for so long. The tumour did not blanch. Thirteen mice were kept as controls. Of the treated mice, No. 1 received 15 injections, and when removed the tumour was found to be hæmorrhagic at the periphery, and red patches were present in the centre. The tumour was soft and had not increased in size during the treatment. No. 2 was injected 15 times. The tumour was necrosing and very soft. There were many hæmorrhages, a cavity in the centre containing blood; the tumour was very soft, and had decreased in size. No. 3 received 15 injections. The tumour was necrosing, hæmorrhages were found throughout and a cavity containing blood in the centre. The tumour was a little softer. No. 5 received 6 injections. The tumour was slightly hæmorrhagic and a little smaller. Of the 13 controls three tumours got a little smaller, the rest grew as usual. There were no hæmorrhages in the tumours or in the capsules.

There can hardly be any doubt, in view of these results, that these two substances produced somewhat similar results to the substances used by Wassermann and by Neuberg and his collaborators. In the case of the pituitary extract, where the dose was larger and more injections were given, necrosis was induced as well as hæmorrhages, and the growth of the tumour was apparently checked in a large proportion of cases. The mechanical explanation suggested above appears to explain the action of the ernutin and of the pituitary extract, and there is no suggestion that there was any specific action upon the cancer cells. We would suggest that in view of these experiments the probable explanation of the results obtained with the other substances used by Wassermann and Neuberg and his collaborators is also mechanical, although, as the substances they used were highly toxic, their results, in the case of the animals that survived the treatment, were more perfect. It seems possible that something might be done towards producing an effect upon cancer cells by injecting substances which will tend to kill the cells, in combination with something which will contract the blood-vessels of the body, such as pituitary extract and ernutin. The passive dilatation of the vessels in the tumour should collect the toxic substance there, though, of course, it will be diffused over the whole body to a less extent. There is no evidence that Wassermann's or any of the other substances used have any specific action upon cancer cells, as the contraction of all the blood-vessels excepting those in the tumours accounts for all the results that have been obtained.

[3] Walker and Whittingham: THE LANCET, Nov. 16th, 1912, p. 1358 Walker, Charles: Science Progress, No. 25, vol. vii., July, 1912.

[4] Walker and Whittingham: Journal of Pathology and Bacteriology, vol. xvii., p. 232, 1912. Walker, Charles: Science Progress, Nos. 24, 25, and 26, vols. vi. and vii., April, July, and October, 1912.

THE TREATMENT OF LARGE HERNIÆ.[1]

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IT is surprising how many middle-aged individuals of both sexes are going about with very large herniæ in various situations under the impression that they are beyond the reach of cure. Many try one kind of truss or belt after another, often to their hurt and always to their inconvenience, until they become hopeless and give them all up. And yet many of these sufferers might be cured by carefully planned operations enabling them to dispense with all support from appliances. There are some, no doubt, who suffer besides from this or that general disease for whom an operation is a serious matter. They may have chronic bronchitis, albuminuria, glycosuria, sclerosed arteries, or suffer from the effects of chronic alcoholism. But even so, some of these cases can be relieved with comparative safety, and often, by enabling them to adopt more active habits, with much improvement of general health.

The treatment of large herniæ by truss or belt I am obliged to say, after seeing much of them, is usually eminently unsatisfactory. When an inguinal hernia has attained to a certain size it will usually be found that no truss, however powerful and well fitting, will retain it. And to wear a truss over a rupture which is not reduced can only lead to harm; it is a fruitful source of adhesions within the sac and sometimes of obstruction. In the case of a very large *umbilical* or *ventral* hernia the condition may be

[1] A post-graduate lecture delivered at the Medical Graduates' College and Polyclinic on Feb. 5th, 1913.

palliated, to be sure, by well-adjusted belts, and the steady advance in bulk be checked to some extent. But no form of belt with which I am acquainted will prevent a large ventral or umbilical hernia from escaping from the ring. Belts may help a patient who is debarred by some grave ailment from undergoing an operation, but only by controlling the weight of the protrusion, and even that only imperfectly. In the future it is to be hoped that fewer and fewer people will be allowed to acquire large herniæ and to drift into middle life with them without some well considered attempt being made to cure them by operation.

It must not be forgotten that unless they are relieved of their herniæ they are constantly subjected to risks of several kinds. Among these may be mentioned strangulation, incarceration following on constipation, and all the evil results to general health which depend on curtailed active exercise. Illustrations of this are only too frequent in all walks of life. And these risks and disabilities have to be balanced against those of operations for their relief. The latter, real enough in former years, are apt to be too much emphasised at the present day, and one has seen many cases restored to activity and excellent health who have been operated on in the face of chronic and even acute bronchitis, of alcoholism, albuminuria, and glycosuria. The fact is that each case must be considered for itself and the *pros* and *cons* carefully balanced before a final decision can be come to. In practice some of the apparently least favourable cases have turned out the best in the end. Experience alone can guide us in our choice. Let us take an illustration or two.

Successful Operations in Unfavourable Cases.

I was called some time ago to the country by Dr. C. R. A. Sutton, of Sidcup, to see a very stout lady, weighing 18 st., who had had a large umbilical hernia for several years. A few months before she had had a "stroke," with left hemiplegia, which was still present. A day or two before I saw her the left side of the skin over the sac had become gangrenous and had given way shortly before my visit, exposing the contents, which consisted of small intestine. As the surface of the skin around the sac was eczematous and very foul, boracic fomentations were applied over all for 24 hours. Then, as the patient had bronchitis, I operated under local analgesia. The whole of the gangrenous skin and sac were excised and the peritoneum stitched up. The rectus sheath on each side was split up on its inner border from above downwards and the proximal borders of each united in the middle line over the peritoneal suture. A wire filigree was then inserted under the outer edges of the rectal sheaths on either side, and these were stitched over the network. Skin suture followed. Primary union was found to have taken place at the first dressing. Perfect recovery followed, and the patient was able to travel to Scotland not long after and remains quite well now, as Dr. Sutton kindly reports. More unfavourable conditions could hardly be thought of in view of the hemiplegia, the bronchitis, and a gangrenous sac. It may be said that here there was no choice but to let the patient die, and therefore the operation was quite justifiable. That is so, but the case proves that very unfavourable conditions do not always render an operation hopeless.

Another case illustrates the same thing. A gentleman aged 72, formerly of sporting habits, had been for a long time prevented from taking any active exercise by a very large right inguinal hernia, and he expressed himself as very miserable. His general condition was not good in several respects. He was described by his family adviser, Dr. J. F. Macpherson, of Basingstoke, as "chesty," as having at times albumin in his urine, and as living very well. Every kind of truss had failed to control the hernia. I was asked to operate as he was determined to face the risks put before him to obtain relief. Spinal analgesia was considered the safest method of relieving pain and obtaining perfect relaxation which was necessary on account of the size of the protrusion and the wide ring to be closed. The ordinary Bassini operation was done under the most ideal conditions as to relaxation and quiet breathing and cheerfulness during operation, and convalescence was absolutely uninterrupted; not a hitch occurred from beginning to end. I have heard of him within the last few days as enjoying his restored activity during the six months which have elapsed since the operation.

It is not necessary to add to these two cases, which occur to me at the moment, to emphasise the fact that adverse general conditions do not always contraindicate operative interference; many more might be cited. It is a question of selection of cases here as always in surgical work. And in addition we have to study, when conditions are not as favourable as could be wished, whether they cannot be improved by general measures until an operation is admissible.

Factors Supposed to Contradict Operation.

It is worth while to consider now briefly what are some of the factors which are often thought to weigh against operative treatment of hernia. In the first place, let us take the size of the protrusion. I venture to think that there are not many herniæ too large for operation. There may be a few. But the reasons why we are well advised to refrain from operation in such cases are not always realised. It is not the actual size of the tumour that is the obstacle, for we know that many other as large or larger abdominal tumours, involving even greater interference with the viscera, may be removed safely. It is the fact that these voluminous herniæ *are not going to be taken away*—that is the difficulty. These bulky masses *have to be returned into the cavity of the abdomen* —that is the trouble. When a large bulk of the abdominal contents have escaped beyond the control of the parietal muscles the latter contract and the peritoneal cavity becomes smaller. If this condition of things has lasted long, perhaps for years, the reduction of the protrusion may be very difficult even without the presence of adhesions, and may be resented by the abdominal muscles which have accommodated themselves to the reduced capacity of the cavity. It stands to reason that if a very large hernia containing much omentum and other fat be returned into the peritoneum the pressure within is considerably increased, and sometimes with very injurious effects. Perhaps the worst of these is interference with the movements of the diaphragm. This might be of less importance to younger people, but among those past middle life with more or less rigid thoracic walls, and relying to a great extent, therefore, upon abdominal breathing, the embarrassment of the latter may be serious. This risk is accentuated if the lungs be emphysematous, or if the patient suffers from acute or chronic bronchitis, or if he be very obese and the heart be weak. I have heard and read of such cases, though I have not seen them, where the interference with respiration and cardiac action has been fatal: the patients have simply been suffocated because the movements of the diaphragm were obstructed.

A patient affected by the conditions just alluded to should be put to bed for some weeks on a strict regimen to reduce the amount of fat and fluids in the tissues, and daily attempts should be made to return and retain the hernia within the abdomen. If the mass can be reduced and cause no embarrassment to respiration, one element of danger is eliminated. The restricted diet and, before all, the denial of fluids may be reinforced by purgatives regularly to unload the bowels and further reduce the volume of the abdominal contents. There can be no doubt that many cases can be brought well within the reach of operative treatment by these means. Of course, acute bronchitis, marked albuminuria, or much sugar in the urine contraindicates immediate operation, except in cases of urgency. But even these conditions may often be ameliorated by treatment in bed with suitable remedies and free purgation, after which operation may be admissible. The very fact, so often seen, that where an operation has been unavoidable on account of strangulation, the patients have recovered in spite of the presence of these general diseases enforces this conclusion.

The next point which requires consideration is age. I do not think, apart from the conditions referred to, that age, unless it be *very* advanced, affects the question of operation necessarily. In extremely old people, of course, it is doubtful whether operation for any condition is, so to speak, "worth while." They are near the end of life in any case, and may be disposed to accept the ailment in question as their last message. Unless they are undergoing intolerable suffering they may, perhaps, be fairly left to any palliative measures suitable to their case. But we all know that many persons at 70 are younger in tissue and general vitality than others at 50. I recall a case in which some three years ago I was asked to operate on a patient on or about the anniversary of her eighty-fifth birthday for carcinoma of the transverse

colon, which was causing intolerable pain. I very seriously doubted the propriety of interference at such an advanced age, but she insisted that it should be done. The result was complete relief, and she lived in comfort for 15 or 18 months longer, dying at last of old age. Such cases remind us that years alone should not be a criterion in questions of operation.

Great obesity is another condition which deters many patients from contemplating operative relief, and some surgeons from attempting it, and doubtless it is an undesirable factor. But there are many very stout patients whose general health is very vigorous and whose tissues have lost but little vitality. These may be operated on with but little extra risk. It is the pasty, flabby, anæmic corpulence which gives cause for hesitation. But, as already stated, a course of rational dieting, purgatives, tonics, and rest in bed are often sufficient to render the conditions favourable.

The possibility of extensive adhesions in large herniæ has also to be carefully considered. These in a lesser degree are common in such cases, but it is only when they are very extensive and involve the intestines that they become a serious obstacle to operation, mainly on account of the time lost in dealing with them. If it is only a question of adhesions between the omentum and the sac—and this is the most common condition—there is a formula I always adopt which renders them immaterial during operation. The long and tedious process of separating them is unnecessary. The omentum at the neck of the sac above where it is unadherent is simply drawn out of the abdomen, tied in whole or in part, and cut below the point of ligation. The sac is then removed with all the adherent omentum. This saves much time and bleeding. To tie off the root of a large omental protrusion, controlling its vessels with a few fine sutures, is a simple, quick, and effective measure. To divide old and widespread adhesions one by one on both sides is quite another thing, and if it were done the reduced omentum would carry into the abdomen many ligatures and raw surfaces likely to produce fresh adhesions within the abdomen.

In most cases of large hernia it is not difficult to determine beforehand whether the contents are adherent to the sac or not. The duration of the existence of the rupture is some help. For it may be taken as a general rule that the older a hernia is the more likely are adhesions, especially if its neck is small. If the patient has had from time to time evidence of incarceration of the bowel—that is, more or less obstruction in it without actual strangulation—we may expect adhesions. It is believed that in these cases interference with the return of blood from the extruded bowel has led to its engorgement and the exudation of lymph on its surfaces. Besides this there has probably been transudation of toxins, and in some cases of bacteria, which can, we know, pass through congested though still living tissues, exciting a septic exudation and still firmer adhesions. Of course, when the rupture returns on the patient going to bed the case is simple. But in some cases of omental hernia which do not thus return or even cannot be coaxed back by taxis there are no adhesions. The reduction is prevented by the condensation of the omentum into a hard rounded fibrous mass which cannot pass the neck of the sac. This is often seen where ill-fitting and too powerful trusses have been long worn without proper reduction of the mass. Reducibility of a hernia without any interference with the movements of the diaphragm or other evidence of intra-abdominal pressure may be taken then as a factor favourable to operation. In some cases a great proportion of the contents, usually intestine, can be reduced by patience, but a certain amount remains irreducible. But as this is generally omentum it is immaterial, as it is to be removed with the sac.

The development of the muscular and fascial walls round the hernial opening has always to be considered in reference to the propriety of operation. The ring may be unusually large and its surroundings very thin and weak. This was formerly considered to contraindicate any operation. But at the present day, with improved plastic methods and the possibility of reinforcing them by silver filigrees the objection has not its former force. Patients at the time of life at which we are usually called upon to perform operations on large herniæ are not as a rule likely to make unusual muscular exertion for the rest of their days and can learn to spare themselves after operation.

As to the skin over and around large herniæ it is often thin and eczematous. It can, however, be rendered at least healthy and aseptic by judicious treatment during the time the patient is more or less confined to bed as recommended above. Moreover, as most of the skin will be removed with the sac between incisions in healthy parts on either side, the state of the skin over most of the sac is no obstacle to operation, as is indicated by the first case described above, where the integument and sac were gangrenous and very foul, and yet after their removal the healthy coverings obtained from the sides healed per primam.

When we study all the foregoing considerations I confess that the arguments against operating must be based upon very clear and special indications to influence me to refrain. Risks there are in these and all operations, but they are not very great, and the stake to be won is a very valuable one. Moreover, the risks of *not operating* are considerable, both as regards the general health and the local condition. It is a frequent experience to see neglected herniæ in the most serious condition which might have been avoided by an earlier operation.

The Preferable Operative Measures.

We can now consider in general terms the operative measures which can be adopted for these large herniæ.

But first and before all it is well to be clear that the preparation of the patient has the most important bearing upon the success of our procedure. Most people with herniæ, as we have seen, are past middle life and obese. As a rule, their general condition will be improved by a stay in bed for two or three weeks, not necessarily all the day or in a recumbent position, which some cannot tolerate. The reasons for this I have already stated. Fresh air and mental quiet are also to be secured. If the protrusion can be reduced into the abdomen every effort should be made to retain it there in order that all the viscera shall become accustomed to its presence once more, and especially the diaphragm. Pulmonary, cardiac and renal troubles may of course be so marked as to contraindicate any operation, but in their milder forms may be improved by the rest in bed combined with dieting and suitable drugs. Some or all have often been present in cases of strangulated herniæ, and have not frustrated the operation or prevented recovery, as we know.

The rest in bed will also usually enable us to secure the highest possible standard of cleanliness of the skin all over the field of operation. This is not always an easy matter, for large herniæ are very prone to become eczematous under the pendulous parts, especially if umbilical or ventral, and this intertrigo is apt to become very foul. Large herniæ about the groin, too, require great care in this respect. All will require daily washing with the hottest water that can be borne and often astringent antiseptic lotions for a long time before we can trust them to be practically aseptic. No operation should be done that can be avoided until we are sure of our ground here. Finally the night and day before operation there is no better antiseptic application than a 2½ per cent. solution of iodine in ethylene dichloride painted freely over the whole field of operation.

The question of the proper anæsthetic to be used will be variously answered for different cases. I do not think any hard-and-fast rule should be followed. A local anæsthetic is, of course, the safest, and I use it frequently. But for very large herniæ it is difficult to secure perfect analgesia over the extensive area involved, and it does not produce that general muscular relaxation which is so desirable when we have to reduce very bulky contents.

Inhalation of ether has much to recommend it if combined with a preliminary injection of atropine, especially if the operation be protracted. But it is apt to produce coughing and straining, which are very embarrassing when the hernial contents have to be replaced, and respiratory troubles are likely to follow its prolonged use.

Venous infusion of ether is well suited for these cases, giving good relaxation and perfect quiet when well administered. It keeps up the patient's strength, too, during a long operation by virtue of the amount of saline solution carrying the ether. There is less objection here to its undoubted effect of encouraging bleeding, inasmuch as the tissues to be divided in a hernia operation are less vascular than in most others.

The objections to chloroform in good hands are, in my opinion, not great as a rule, but when pushed as far as absolute relaxation, so desirable in these cases, its dangers are well known.

Spinal analgesia well carried out gives ideal conditions for the operator, and though it has dangers, the full extent of which are not yet known, it is superior to the foregoing in many ways. I have used it now in some hundreds of cases of hernia operations without a fatality, and it has certainly facilitated the accurate performance of them to a degree that no other anæsthetic could do. The absence of rigidity of the muscles and of all respiratory excitement during and after operation renders the procedure very easy. Then the patient can take nourishment within a few hours, and this is of great importance, especially in elderly people. But, as I said before, each case must be considered on its merits.

It is assumed that in all these cases purgatives have been freely used for reasons given. These should, however, be stopped at least 48 hours before operation, to give rest to the bowels, which are otherwise likely to be distended with gas. The night before operation an enema will clear out the rectum and relieve flatulence if some turpentine be added.

As to the various methods of operation to be performed for these large herniæ, I have described them so recently in the "System of Operative Surgery," edited by Mr. F. F. Burghard,[2] that it is not necessary to go into detail about them, but some general remarks on them will not be out of place.

Speaking generally, I have in almost every case found Bassini's operation carried out with every attention to detail to be quite adequate for all inguinal herniæ great and small, and I consider it the best method when done with care. In some cases where the tissues are very slack the modification of overlapping the edges of the rings described by Halsted[3] will be found to give a thicker scar than that formed by merely drawing the edges together. The large sac need not be dissected formally out of the scrotum. At its neck, of course, it must be separated and for some little distance. To do more is to risk considerable oozing into the areolar tissue of the scrotum and a troublesome hæmatoma. An exception to leaving the sac intact in the scrotum is when the contents are almost universally adherent. Then it should be removed with the attached omentum. When this is separated at the neck and well drawn down it is tied off and cut across, the lower part of the sac when adherent to the omentum being taken away with it, or if non-adherent left open, as much of it being removed as was separated below the neck. It must not be forgotten that when the veins of the cord are pressed upon by the reduced rings an engorgement of the veins of the scrotum follows which favours oozing, so that all small and large bleeding points should be attended to before the wound is closed. If, in spite of this, there is still a tendency to ooze, a drain should be introduced for 24 hours, as a hæmatoma in this region may be troublesome. After 24 hours the drain will probably do no good, and may even form a track for the infection of the part from without. The possibility of septic matter lurking in the folds of the scrotal skin and its hair, sebaceous and sweat follicles, must always be borne in mind. Unless great care has previously been taken in the daily preparation of the scrotum to encourage these glands to act freely and carry any hidden bacteria to the surface, the danger of infection during or after operation is considerable. Frequent washings with soft soap and water as hot as can be tolerated are called for, followed before operation by the iodine solution. But the latter must be used with caution, as I have seen it produce eczema in some cases. In many cases the washings, supplemented just before operating by the free use of spirit, will be quite sufficient. A moist eczematous condition here may be very troublesome.

As to the use of silver filigrees inserted deeply in inguinal herniæ to add strength to the abdominal wall, I venture to think that in the large majority of cases they are unnecessary. A strong enough barrier to the redescent of the hernia can be made without them by suturing. But I have used them, I think with advantage, in some few cases where the structures were very thin and atrophied; at all events, they appear to be less required and more difficult to arrange here than in the large ventral and umbilical herniæ. In the latter they seem to me to be of the greatest value, not only because they give a certain amount of support for a time, but because I believe their presence in the tissues provokes an exudation of lymph without sepsis, which organises into particularly firm fibrous tissue. I have seen to-day a man the greater part of whose left rectus muscle I had to take away three years ago because it was involved in a carcinoma of the transverse colon which had fungated through it. Here there was little or nothing to replace the muscle, and I covered the opening with a silver filigree and drew the skin over it. And now, though the scar is very thin, thin enough to be moved by the intestines underneath it, there is no hernia, although the man plays golf and is a performer on a wind instrument. Both these strains are well borne, and would infalliby have caused a hernia if the support had been as weak as it certainly appears thin. The use of these filigrees is only required, as a rule, in very obese people with one or other form of ventral hernia the rings of which are loose and so thin that there is but little material to work upon for making a firm barrier to redescent of the rupture. Here the filigree may be inserted either directly upon the closed peritoneum and transversalis fascia or within the sheaths of the recti muscles after they have been opened vertically on either side; the edges of the sheaths being united over it and the skin over this. Many ingenious plastic operations have been devised to meet the needs of these extreme cases, and some of them I have practised. But none appear so rational and feasible as the support by filigrees. Several objections have been raised to their use. So far as I can see the most justifiable is that the wire may break in course of time, and the broken ends cause irritation. This has happened, but is only of moment if too thick a wire has been employed. When the wire is very fine no harm can arise; the network remains a support broken or unbroken, and from what I have seen the fibrous tissue formed about it is particularly firm and strong.

Another objection is that if suppuration occur the wires must be taken out, and this is a matter of great difficulty and leads to weakening of the scar. But this need not be done. I have planted filigrees in wounds actually suppurating, and far from their keeping up the inflammation, they have appeared to control it, probably, as has been pointed out, because of the silver salts produced in the tissues by chemical action on the wires. The antiseptic action of the silver salts is well known. Be this as it may, I have seen such suppurating and granulating wounds heal over the wires in a way which suggested that they were quite harmless if not beneficial, as in the case quoted just now which I have seen to-day. Once recently, in operating through an old abdominal scar into which some surgeon whose name I do not know had inserted a wire network, I came upon many broken pieces of silver wire and removed them. But these were far and away too thick. They were somewhere about a millimetre in gauge instead of being like medium-sized sewing thread. The fact of the matter is that some scores of my cases have been going about for years with these filigrees in their scars, and from what I have seen of them I feel sure to their benefit. Indeed, in some cases of very large herniæ with wide thin rings it is hard to imagine any other mode of giving support.

In this brief sketch of a very large subject I have tried to give some general considerations which have guided myself in dealing with a most troublesome class of cases. I have, in the first place, had no mortality among them, which shows that it is possible to avert the dangers which have undoubtedly to be faced. And the results *quâ* non-recurrence have been very encouraging. In some very obese patients, with more or less pendulous abdomens, I advise them to wear a well-fitting broad belt or bandage after operation for ventral hernia. This will help to bear some of the weight of the parts. But in most cases this is not necessary. These patients should also be advised to avoid everything which contributes to their corpulence and to take regular moderate exercise. For every reason the amount of fat in their tissues should be reduced.

Before closing, may I draw attention to a snare which sometimes awaits the inexperienced in operating in inguinal herniæ with large rings? This is the presence of part of the bladder in the sac. I have seen many such cases (two operated on in private since this lecture was sketched out) and recognised the condition in time to avoid injury to the viscus in every case. But it is a condition which might easily lead to disaster, and has done so, as we know from several published cases.

Harley-street, W.

[2] System of Operative Surgery, vol. ii., p. 594. London: Henry Frowde and Hodder and Stoughton.

[3] Ibid., vol. ii., p. 596.

THREE CASES OF POLYCYTHÆMIA.

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With Report on the Necropsy in One Case

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THE subject of polycythæmia has been discussed so recently, so elaborately, and with such lucidity by Dr. Parkes Weber[1] that only a brief statement is required by way of introduction to the following records of cases. It may be recalled, however, that polycythæmia (polycythæmia rubra, polyglobulism) means an excess of red corpuscles (erythrocytes) in the blood. This excess may be relative or absolute.

I. Relative polycythæmia is due to concentration of the blood, as in cases of severe diarrhœa or profuse sweating.

II. Absolute or true polycythæmia (polycythæmia rubra vera) is due to excessive erythroblastic activity of the bone marrow. In this condition the hæmoglobin is increased as well as the erythrocytes, but the colour index is usually below 1. The total volume of the blood is often, if not always, increased (polyæmia, plethora vera). The viscosity of the blood is increased. The coagulability varies independently of the richness in erythrocytes and hæmoglobin. True polycythæmia may be either symptomatic or primary.

1. Symptomatic or secondary polycythæmia is an erythrocytosis, analogous to a leucocytosis. It is met with in cases of chronic cyanosis associated with heart or lung disease, and it is also found in man and other animals living at high altitudes. This erythrocytosis is compensatory in its nature, and is attributable to stimulation of the bone marrow by the deficiency of oxygen.

2. Primary polycythæmia or erythræmia is analogous to leukæmia, there being no obvious reason why the bone marrow should show the excessive erythroblastic activity. It is known by a variety of names, including "Vaquez's disease," "Osler's disease," "splenomegalic polycythæmia," "myelopathic polycythæmia," "polycythæmia with chronic cyanosis," and "erythrocytosis megalosplenica." These titles, however, are not all suitable, since cyanosis is absent in some cases, while in other cases there is little or no splenic enlargement. Whether the syndrome represents a single morbid entity, a disease *sui generis*, may be more definitely ascertained when a greater wealth of pathological and clinical material has accumulated, and the degree of affinity between the different types can be more precisely determined.

The symptoms in the initial stage may be of a vague as well as varied character, and it is probable that the disorder of the blood may exist for a considerable time before it causes any grave or manifest disturbance of the general health. It is further probable that the disease would be found to be more common than is generally recognised if an examination of the blood were a more constant routine of clinical work. The following cases illustrate different aspects of the affection.

CASE 1. *Polycythæmia; cyanosis; ? splenomegaly.*—Captain X. Y., aged 47, formerly a master mariner, but now employed on shore, was brought to see me by Dr. John Ritchie on Oct. 2nd, 1911.

Early history of the illness.—As far back as December, 1906, the patient consulted Dr. Ritchie about the condition of the urine, but no abnormality was detected in it at that time. He gave a history of constipation, and said he had pain in the lower abdomen, but nothing definite could be found to account for it. It was afterwards discovered that he had a stricture, and he was sent to a surgeon for treatment. Then he went abroad and came back. About May, 1909, he became subject to "prinkling" in the legs and shoulders, especially after a bath, and about the same time the eyes became suffused. Blueness of the face was noted in the winter of 1909-10, and it had never altogether cleared away. He consulted Dr. Ritchie about it in March, 1910. In June, 1910, he sailed for South America, and when he reached hot latitudes the blueness of the face was found to be intense.

In May, 1911, a considerable quantity of albumin was found in the urine, and it would appear that from this time onwards albuminuria was always present, though as a rule no tube casts could be detected. On more than one occasion the specific gravity was noted as 1015.

On May 25th, 1911, Dr. Ritchie took note of the existence of a non-inflammatory redness of the palate and fauces. On Sept. 14th, in the same year, Dr. Ritchie noted: "He is quite convinced that his general condition is due to 'bile'; his face is still red, so are the fauces; the skin generally shows tendency to redness; lately had a vomiting attack."

Condition as noted on Oct. 2nd, 1911.—A livid red colour was present on the face, and even on the trunk there was an appearance suggestive of a sluggish circulation. There was no shortness of breath, however, even on exertion, and there was no swelling of the feet. The appetite was good, but the tongue was dirty, and some of the teeth were bad. The patient said he was liable to cramps in the stomach, which were particularly bad in March, 1910. About once a week he would have a burning feeling, and then froth would come up, followed by a little blood. The bowels were regulated by cascara. It was seldom that he suffered from bleeding piles. The patient said that he had lost about 2 st. in weight in the last two years, but there was no marked loss of strength.

Examination showed that, with the exception of lack of purity of the second aortic sound, the physical signs connected with the heart were normal, nor was there any evidence of disease of the aortic arch. The wall of the radial artery was perhaps thickened. The lungs were healthy. No change was found in the spleen or superficial lymph glands. The liver seemed to be slightly enlarged. The retinal veins were full and dark, but in other respects the fundi were normal.

When a specimen of blood was collected on blotting paper the colour was not uniform, dark specks being intermingled with bright red portions. The red cells numbered 9,600,000 and the white cells 8600 per c.mm. The hæmoglobin was about 100 per cent., so that the colour index was, approximately, 0·52. A stained film had a normal appearance.

The patient had never suffered from malaria, dysentery, or yellow fever. He used to smoke about four ounces of tobacco weekly, in addition to cigars. He was recommended to diminish the consumption of tobacco, or to stop it, until the condition of the fauces improved. Alcohol was forbidden. A daily dose of Gregory's powder was recommended, to clean the tongue. A small dose of mercury was to be taken twice a week, and he was to have a tonic containing nux vomica. Red meat was to be taken only once a day, and he was to guard against constipation.

April 29th, 1912.—The patient called again to see me. He had not been at sea since his last visit, but was on full duty ashore. The following is an account of his condition.

He says he has lost little weight, if any, since his last visit, and he feels much better in every way than he was two years ago. His stomach and bowels are now in very fair condition, though the tongue has a yellowish-white and rather thick fur. The appearance of the face is remarkable. There is a blue or purple colour over the nose and cheeks, with dilated, minute veins; but over the rest of the face, for instance on the brow, the colour is red without any admixture of blue, and without visible veins. The appearance is the more striking in view of the complete absence of any evidence of respiratory embarrassment. He says that when he walks smartly the face is particularly apt to become blue, but he has no shortness of breath, faintness, or cough, though on walking quickly he may, of course, have slight palpitation.

The abnormal colour is not confined to the face. The lips, gums, and conjunctivæ are unduly red. The palms of the hands also are red, the particular tint being magenta rather than purple. The red can be seen on the toes and anterior part of at least one sole. The extremities of the limbs are quite warm. The abnormal redness is seen on the surface of the trunk, though not in such high degree as on the limbs. In any part where pressure is applied to the red skin pallor of very brief duration is produced. The ophthalmoscope shows that the discs are red and the retinal veins are large and very dark in colour, but otherwise the fundi are normal.

When an attempt is made to estimate the hæmoglobin by means of a hæmoglobin scale it is found that the blood does not penetrate the blotting-paper as normal blood would do. According to the Tallqvist scale, the hæmoglobin is from 90 to 100 per cent. With Hall's scale, on the other hand, no standard can be found which exactly suits the blood; the hæmoglobin richness appears to be somewhere from 50 to 80 per cent., but different standards in the scale resemble the blood in different ways.

The red cells are found to number 9,600,000 and the white cells 16,000 per c.mm. A differential count of the white cells shows the polymorphs to amount to 62·5 per cent., the lymphocytes to 27·5 per cent., and the mononuclears to 7·8 per cent. of the white cells.

The heart and lungs appear to be normal. The radial artery is not obviously thickened. The systolic pressure in the brachial artery is 130 mm. Hg. What is taken to be an enlarged spleen is felt below the costal margin, but this cannot be corroborated by percussion. There is no tenderness in this region. There is a mere suspicion that the liver is enlarged. The superficial lymph glands are normal. The urine is acid, and has a specific gravity of 1020. Urea is present to the extent of 5¼ grains per ounce. There is abundant albumin, but no blood, pus, or sugar. A considerable number of tube casts can be recognised, particularly of a hyaline character. Impotence has been present for fully 18 months. It is regarded as part of a general lack of energy.

It was decided to treat the patient by the application of X rays over the spleen. On Oct. 22nd, 1912, Dr. Ritchie reported that the patient had been getting the treatment by X rays; that the spleen was somewhat smaller; that there was less albumin in the urine, and that the red corpuscles after numbering 10,000,000 or more per c.mm., had fallen slightly in number and then risen again.

CASE 2. *Polycythæmia, with hyperæmia of the skin, but without recognisable enlargement of the spleen.*—The patient, aged 32, a labourer, was brought to the Royal Infirmary by Dr. W. A. Stuart on May 7th, 1912. Three years previously, on July 8th, 1909, while he was lifting an engine wheel off a drilling machine by means of an electric crane, the wheel swung back and struck the inside of the left knee. At the same time the spine was struck against the rim of a wheel behind him. Subsequent examination with X rays at the Western Infirmary showed that a chip of bone was broken at the inside of the left knee. After attention at the ambulance room he resumed work that day. He kept pretty well till the end of November of that year, when he began to have severe pain in the spine, which made him lie up, and he was in bed for ten weeks. He had never been perfectly well since. He was at work during the whole of the year 1911, but did not resume duty after last New Year holidays. He had lost much flesh and strength since the New Year.

It was found on examination that there was slight tenderness over the spine in the lower lumbar region, and there was difficulty in stooping, but no deformity of the spine could be discovered. The patient walked with a slight halt in the left leg. He was admitted as

[1] Quarterly Journal of Medicine, vol. ii., No. 5, October, 1908.

an indoor patient on May 21st, 1912, and he remained in the wards till June 21st.

Previous health.—He had pneumonia on the right side about 12 years ago, and he fancied he had never been quite so strong since. He had catarrh of the stomach eight years ago, and was very ill for 14 weeks. He had always been nervous and given to worrying. No information was obtained as to the family history.

Condition while in the wards.—Examination of the heart, lungs, liver, spleen, superficial lymph glands, testes, rectum, urine, and fundi revealed normal conditions. The appetite was fair. There was no vomiting, and the bowels were regular. The temperature was subnormal all through, and the weight remained constant. There was pain on pressure over the internal semilunar cartilage of the left knee-joint.

Examination of the blood showed that it was abnormally rich in red corpuscles, and at times in hæmoglobin also. The white cells might be normal, or deficient, or excessive in number. The colour index was usually below normal.

Date.	Red corpuscles per c.mm.	White corpuscles per c.mm.	Hb. per cent.	Colour Index.
May 25th, 1912	6,700,000 ...	3,125 ...	100 ...	0·75
,, 30th ,, ...	5,834,000 ...	12,500 ...	120 ...	1·0
June 14th ,, ...	7,133,000 ...	8,432 ...	110 ...	0·77
,, 20th ,, ...	6,500,000 ...	8,750 ...	110 ...	0·85

Differential count of white cells.—Polymorphs, 56·12; lymphocytes, 26·02; mononuclears, 17·34; and basophiles, 0·51.

Blood pressure (Oliver's manometer).—May 31st, 1912: systolic, 120 mm. Hg; maximum pulsation, 100 mm. Hg; minimum pulsation, 80 mm. Hg. June 20th, 1912: systolic, 135 mm. Hg; maximum pulsation, 105 mm. Hg; minimum pulsation, 70 mm. Hg.

The blood was examined bacteriologically by Mr. J. Archibald Campbell, and was found sterile after 72 hours' incubation.

On June 20th it was noted that there had recently been distinct hyperæmia observed on the surface of the body, not only on the face, but also on the trunk, forearms, and hands.

Condition in September, 1912.—The patient called at the wards on Sept. 9th and 10th. He still complained of general weakness, and said that he became short of breath on going upstairs or walking any distance. His weight had fallen from 8 st. 7 lb. on June 15th, to 8 st. 3 lb. on Sept. 10th. The pinkish colour of the forehead was still recognisable, though not so striking as formerly.

There was no evidence of enlargement of the heart, and the heart sounds were normal. There was no sign of dilatation of the aortic arch. The radials were in good condition, and their tension did not appear to exceed the normal. The lungs were healthy. A scar was found in front of the right sternomastoid muscle, where an operation had been performed in boyhood, but elsewhere the superficial lymph glands were normal. There was no enlargement of the liver, and no certain enlargement of the spleen. The optic discs were healthy.

On Sept. 9th the red corpuscles numbered 7,800,000 and the white cells 3000 per c.mm. The hæmoglobin was 110 per cent., and the colour index 0·7.

CASE 3. *Polycythæmia; splenomegaly; excessive arterial pressure; arteriosclerosis, with gangrene of the toes, fibrosis of the kidneys, and retinal changes; no cyanosis; fatal issue and necropsy.*—The patient, aged 45, Jewish, a tailor's presser, was admitted to the Royal Infirmary under the care of Mr. H. Rutherfurd, on August 11th, 1911. The man's complaint was of pain in the toes of both feet, which had troubled him for four months, and had been specially severe during the last few weeks. It was found that gangrene was threatening the toes, the arteries were sclerosed, the spleen was enlarged, and the urine contained albumin. As the case was recognised to be medical rather than surgical he was transferred to my wards on August 18th.

According to the history given, pain set in gradually in both great toes about the beginning of May, 1911. The condition of the right great toe became steadily worse, and a month or two before admission its colour became dark. There were tingling and pricking as well as pain, and sleep was much disturbed. The left great toe became easier. The patient continued at his work until two or three weeks before admission.

Past history.—The patient was under the care of Dr. Ebenezer Duncan in the Victoria Infirmary from April 9th to May 27th, 1905, and through the courtesy of Dr. Duncan and the superintendent, Dr. D. O. Macgregor, I have been able to ascertain some facts about his condition at that time. His age was stated to be 40, and he was admitted as an urgent case of hæmatemesis. It was reported that his stomach had troubled him for some years, and that his right eye had been gradually becoming blind during the two or three years preceding his admission (see, however, later in this report). The heart and lungs were found to be healthy, and no tumour or dilatation of the stomach could be detected. The spleen was much enlarged, its lower border being at the level of the umbilicus and its anterior border almost at the middle line. The red corpuscles numbered 2,900,000 and the white cells 22,800 per c.mm. A differential count of the white cells showed the polymorphs to be 73·9, the lymphocytes 20·6, the eosinophiles 2·4, and the large mononuclears 3·1 per cent. The right eye was found to be blind, with atrophy of the disc, and with disturbance of pigment in the neighbourhood. The patient got on very well so far as his stomach and general condition were concerned, but Dr. Macgregor states that no marked benefit was derived from X ray treatment of the enlarged spleen.

The continuation of the past history, which was obtained after the patient's admission to the Royal Infirmary, shows that he had left-sided pleurisy four or five years ago. From about that time onwards he suffered from frequent headaches and from constipation. He continued liable as before to suffer at times from pain in the stomach after taking food. After some years he got into the way of drinking more fluid and passing more urine than before, and he found that he was very easily fatigued. After the trouble with the toes began he lost flesh. He claimed to be a very moderate drinker, stating that he spent scarcely 10s. a year on liquor. He denied that he ever had any venereal disease, though he admitted the possibility of infection. In May, 1912, while he was resident in the wards, his blood was examined by Wassermann's test, and this was found to give a negative result.

He had not suffered from shortness of breath, palpitation, faintness, giddiness, or tinnitus. It may be added here that at no time was cyanosis a feature of his case.

Family history.—His parents both died in old age. The family consisted of five members, all of whom survived. The other four were healthy. The patient himself was married and had four children, all of whom were healthy.

Condition on admission (August, 1911).—The right great toe was painful, swollen, cold, extremely tender, and discoloured, being partly red and partly dark blue. The left great toe was slightly discoloured and tender. The pulse was regular and of high tension, and the arterial walls were thickened. The apex beat of the heart corresponded to the nipple line. There was no murmur. The lungs were healthy. The liver did not appear to be enlarged. The spleen was considerably enlarged, so that its lower border could be felt at a level half an inch above the umbilicus. The urine contained a trace of albumin, but no sugar. There was no œdema of the legs. The reflexes were normal.

Other facts noted in the course of his residence are as follows:

Eyes.—The patient stated that he became suddenly blind in his right eye 17 years ago, when he was in excellent general health. There was pain in the eye for some weeks before the blindness set in. Examination showed that the disc was atrophied and that the arteries were greatly narrowed. In the macular region there were white spots and streaks of degeneration, and there were in addition numerous collections of black or brown pigment. This eye was the seat of severe pain for some weeks before he became blind. On account of the blindness in the right eye no mydriatic was used at this period for the left eye, and the macular region was not properly observed. It was noted, however, that the disc was hyperæmic.

Blood.—In the course of his residence the number of red corpuscles varied from 5,800,000 to 6,400,000, and that of the white cells from 11,800 to 20,400 per c.mm. The hæmoglobin varied from 95 to 120 per cent. The colour index, therefore, was below normal. A differential count of the white cells on Nov. 29th gave the following result: neutrophiles, eosinophiles, and basophiles, together, 75·65 per cent.; lymphocytes, 21·23 per cent.; transitionals, 1·77 per cent.; myeloblasts, 0·4 per cent.; and mononuclears, 0·9 per cent.

The systolic blood pressure was from 180 to 210 mm. Hg. There was some enlargement of lymph glands in both axillæ and in the left groin. The distal portion of the right great toe dropped off on Dec. 3rd.

Dismissal.—The patient was dismissed on Dec. 15th "improved." He had been treated principally by opiates, which were needed to relieve his pain, but from Oct. 9th to Nov. 25th he got potassium iodide in doses of 10 grains thrice daily.

Readmission.—He was readmitted on March 9th, 1912, on account of pain and discoloration in the toes of both feet.

Note of May 3rd, 1912.[2]—Since his readmission on March 9th the patient has suffered a good deal of pain, either in his feet or in his head. Several of the toes of both feet are the seat of actual or threatened gangrene, and the pain associated with this condition has required opiates for its relief. For a time he suffered severely from headaches, but the regular administration of trinitrin, and the use of phenacetin and citrate of caffeine, were followed by excellent results. The temperature has been almost uniformly subnormal. The pulse-rate has been slightly accelerated. General cyanosis is not a feature of the case. The splenomegaly continues. There is no recognisable enlargement of the liver. The enlargement of the heart is still apparent, but there is no murmur. The lungs appear to be healthy. The systolic blood pressure was 210 mm. Hg on readmission, but fell during the administration of trinitrin to 188 mm. Hg two days ago.

The condition of the blood has also changed during his present residence. The red corpuscles fell from 7,200,000 per c.mm. on readmission to 4,000,000 per c.mm. yesterday. The hæmoglobin fell from 120 to barely 100 per cent., and the white cells from 16,200 to 13,125 per c.mm. A differential count of the white cells made yesterday showed the polymorphs to be 81 per cent., the lymphocytes 13, and the large mononuclears 5 per cent. The blood readily penetrated the papers used in connexion with two hæmoglobin scales. Dr. H. H. Borland found this morning that the coagulation period of the blood was 6 minutes 5 seconds.

The urine has recently had a specific gravity varying from 1008 to 1015. Albuminuria is distinct, but there is no sugar. On a recent date, by aid of the centrifuge, a considerable number of granular casts were detected.

Examination of the eyes this morning, after dilatation of the pupils, showed in the right fundus a condition similar to that described in the earlier part of this report. The degenerative changes in the macular region are suggestive of albuminuria. In the left eye there is neuroretinitis. The disc margin is unrecognisable except in a dim way at the lower inner part. The evidence of the swelling of the papilla is most distinct at the upper and upper inner parts. Linear hæmorrhages are present. In the macular region there are early degenerative changes of albuminuric type. Low down in the fundus there is a circular, reddish-brown area, which suggests a hæmorrhage clearing away.

Last phase of the illness.—In the latter part of his life the patient suffered greatly from pains in the legs, and required large doses of opiates. On May 9th an examination of the blood showed that the red corpuscles numbered 4,200,000 and the white cells 10,000 per c.mm. A differential count of the white cells made on May 12th showed that the polymorphs amounted to 73·4, the lymphocytes to 18·0, the mononuclears to 6·3, the eosinophiles to 1·8, and the mast cells to 0·5 per cent. of the white cells. Early in June it was noted that gangrene was spreading to the dorsa of the feet, and several of the toes were separating. On June 11th the liver was found to extend two inches below the costal margin. Blood taken on the same day by Mr. Campbell for bacteriological examination proved to be sterile after 72 hours' incubation. The patient died on June 21st.

Treatment.—The most important remedy was opium or one of its derivatives, which was rendered necessary during a great part of the patient's residence by the severity of the pain. From Oct. 9th to Nov. 25th, 1911, he got potassium iodide, in doses of 10 grains, thrice daily. In March, 1912, he got a tonic containing sodium bicarbonate, nux vomica, and gentian. On March 29th trinitrin was begun, and this gave distinct relief to the headache. On May 15th he began to get the formula recommended by Brunton for excessive arterial pressure, and consisting of potassium nitrate and potassium bicarbonate, of each 10 grains, with sodium nitrite 1 grain, to be taken each morning in hot or aperient water. An attempt was made in the end of May and

[2] The patient was shown on this date to the Glasgow Medico-Chirurgical Society.

beginning of June to apply X rays over the spleen, but this had to be desisted from on account of the feebleness of the general condition.

The following table shows the blood counts and the hæmoglobin at different dates:—

Date.	Red corpuscles per c.mm.	White corpuscles per c.mm.	Hb. per cent.
August 21st, 1911	5,800,000	17,200	95
Sept. 3rd "	5,960,000	12,400	100
" 14th "	6,400,000	20,400	110
Nov. 3rd "	5,600,000	11,800	95
" 27th "	6,400,000	16,100	115
Dec. 9th "	6,330,000	12,800	120
*March 9th, 1912	7,200,000	16,200	120
" 19th "	6,850,000	12,800	120
" 31st "	6,200,000	11,808	120
April 12th "	4,960,000	—	90
" 19th "	5,200,000	—	100
May 2nd "	4,000,000	13,125	—
" 9th "	4,200,000	10,000	—

* On readmission.

It has been known for some time that there is a special group of cases of erythræmia which is characterised by excessive blood pressure, and the recognition of the fact is due largely to the work of Geisböck. Indeed, the late Professor Senator, in his essay on "Polyzythämie und Plethora," published in 1911, divides cases of primary (idiopathic) polycythæmia into the two classes: (1) polycythæmia rubra (erythrocytosis) megalosplenica, or Vaquez's disease; and (2) polycythæmia hypertonica (Geisböck). He points out that Geisböck's disease is distinguished from Vaquez's, not only by the remarkably high blood pressure, but also, as a rule, by enlargement of the left heart and by the absence of splenomegaly. He considers that the high pressure is due partly, but by no means exclusively, to the viscosity of the blood. He does not believe that the two forms can be sharply separated from one another, but thinks it very probable that there are transitional forms which connect them. In the cases described in this paper different intermediate types are represented. It is, of course, possible that the polycythæmia and florid colour of the skin in the second case may in time come to be associated with enlargement of the spleen. In the third case there are the polycythæmia and high blood pressure of Geisböck's disease, accompanied by the splenomegaly of Vaquez's type.

With regard to the third case, not only are the anatomical changes in the blood-vessels, heart, kidneys, retinæ and limbs, which are associated with, and to a large extent the result of, the high pressure, in themselves remarkable phenomena, but they are of interest in view of the Jewish descent of the patient, and the special tendency shown by that race to suffer from obliterative arteritis at an age too early for senile gangrene of the usual kind.

It has been suggested that polycythæmia, with or without splenomegaly, may arise, even though there is no disease of the heart or lungs, through a local obstruction to the circulation, such as is present in extreme passive congestion of the portal system. The third case described might actually be cited as lending support to this hypothesis. But in opposition to this theory, it is to be noted in the first place that the typical spleen met with in chronic passive congestion from heart disease is not a large one; in the second place that splenomegaly and polycythæmia may be present, as in the third case, without cyanosis; and in the third place, that the disturbance in the portal vessels may, like that in the vessels of the limbs, be a late phase, and not a primary factor, in the evolution of the disease. Unless cyanosis is present the theory referred to is scarcely intelligible.

Report of Necropsy in Case 3 and Commentary by Professor TEACHER.

The post-mortem examination in Case 3 was made on June 22nd, 1912. The body was extremely emaciated and livid, and there was old-standing gangrene of both great toes.

The *heart* was greatly and generally hypertrophied, the left ventricular wall measuring seven-eighths of an inch at its thickest part. The papillary muscles of the mitral valve were thick and rather short, and the mitral curtains slightly thickened. Apart from this, the valvular apparatus appeared to have been healthy. The endocardium of the left auricle was thickened. At the apex of the left ventricle there was a globular thrombus of the size of a marble, and the extreme apex of the heart to about the size of a penny was found to be in a state of recent infarction. The coronary arteries showed extreme nodular thickening, amounting to almost complete obstruction in the case of the main anterior branch. There were large agonal thrombi in all the cavities of the heart.

The *lungs* showed extreme venous congestion and a number of early infarctions caused by masses of red thrombus.

The first part of the *aorta* showed only a few small superficial fatty patches; but beyond the region of the great vessels the fatty markings were very numerous, and there were two thick atheromatous patches each about three-fourths of an inch in diameter in the descending thoracic aorta. The ordinary thickenings about the orifices of the intercostal arteries were absent. In the abdominal aorta there was a very large atheromatous patch with great thickening of the tunica intima and a somewhat contracted appearance, but white in colour, being free from fatty degeneration or calcification. The cœliac axis and superior mesenteric arteries appeared to have arisen by a common trunk in the normal position of the latter. This was about the centre of the atheromatous patch, and the orifices of the renal arteries lay just within its lower margin. The orifice of the mesenteric vessel was completely occluded, while both the renal arteries were narrowed to an extreme degree. The lower part of the aorta and the iliac and femoral arteries also showed atheromatous patches. The aorta and arterial trunks appeared to be generally thicker and more rigid than normal.

The *abdomen* presented a very remarkable appearance. The great omentum was drawn upwards and to the left, and contained an enormous number of large blood-vessels which, on closer investigation, proved to be not only veins but arteries. There were dense fibrous adhesions, containing numerous blood-vessels, between the diaphragm and lateral abdominal wall on the one hand, and the spleen and omentum on the other. The spleen was partly buried in the adhesions, partly enveloped in the omentum.

The veins on the exterior of the stomach and the internal œsophageal veins were abnormally large and prominent. The stomach and intestines showed general pronounced venous congestion, and the mesenteric veins were noticeably enlarged close to the attachment of the bowel.

The *liver* was somewhat enlarged, firm, and chronically congested, being of fairly advanced nutmeg type. There were a few fibrous adhesions between it and the diaphragm, but none between the lower surface of the liver and the omentum. The finger passed readily into the foramen of Winslow, and the tract enclosing the portal vessels was felt to be very abnormally thick. On cutting it across the portal vein could not be seen, but the whole tract appeared to consist of blood-vessels forming a sort of cavernous tissue which filled the portal fissure. The mass was diamond-shaped as it entered the liver and measured 2½ in. by 1½ in. It bridged over the space between the portal fissure and the root of the mesentery, occupying exactly the position of the portal veins. The trunk and branches of the hepatic artery were clearly recognisable, and appeared to be normal in size and not atheromatous. At one point in the mass of vessels there was a circular stellate body about half an inch in diameter, having a central solid fibrous column from which septa radiated like the spokes of a wheel. It was composed of blood-vessels, and microscopic examination and further dissection showed it to be the portal vein, which had evidently undergone thrombosis and had been restored by organisation and the formation of new vessels between its original wall and a central column presumably representing the thrombus.

The *spleen* was considerably but not enormously enlarged, and was estimated to weigh at most 16 oz. The middle of the organ, to the extent of about half its mass, was converted into an old infarction, with thick fibrous capsule. The ends and anterior and posterior margins had escaped infarction. They showed extreme venous congestion and fibrosis. Microscopically this was confirmed, the spleen consisting of little more than a congeries of vascular channels with relatively thick fibrous walls. The Malpighian bodies, like the pulp, were atrophied. The splenic artery had been obstructed near the spleen, the vein had been obliterated up to its junction with the portal vein, and channeled again like the main trunk of the portal vein.

The *kidneys* showed extreme venous congestion, and atrophy of the cortex and thickening of the capsule, The surface was smooth. At either end and in between the pyramids there was a considerable amount of surviving renal tissue. Microscopically this presented slight evidence of cirrhosis, but the outer portions of the cortex were reduced to a mass of blood vessels and remains of sclerosed glomeruli. The main trunks of the renal arteries showed great nodular thickening; the smaller vessels general sclerosis with fibrosis of the middle coat and thickening of the intima of the type of endarteritis obliterans. The renal veins, and indeed the vena cava and its tributaries in general, appeared healthy.

The *stomach* showed chronic congestion, catarrh, and erosions.

The *intestines* showed marked venous congestion.

The *bone marrow* in the ribs appeared to be normal, and that of the shaft of the femur was pure fat. Clearly there was no hyperplasia of the bone marrow. The condition of the rib marrow was confirmed microscopically.

The *brain* showed slight atrophy of the convolutions and œdema of the meninges. The large vessels at the base were comparatively healthy in appearance.

Further dissection confirmed the appearance of old thrombosis of the portal vessel back to its origin at the junction of the splenic with the superior mesenteric vein and of the latter into the mesentery. Everywhere the vessel and its radicles were channeled and masses of new vessels had been developed round about them. (The stellate appearance in section could be traced well out in the splenic and main mesenteric veins.)

The arterial supply of the parts dependent upon the cœliac axis and superior mesenteric artery had been maintained, except in the case of the spleen, by means of a very large anastomosing connexion with the inferior mesenteric artery, assisted probably by smaller communications from the lower intercostals and two vessels of about the size of crow quills which arose a short distance above the inferior mesenteric artery and passed towards the ascending colon. The main vessel concerned was the left colic branch of the inferior mesenteric, which was of about the size of an ordinary superior mesenteric artery and ran a very tortuous course

along the descending and transverse colon until it anastomosed with the superior mesenteric trunk through its middle colic branch. From the right side a vessel of about the size of a large crow quill ran along the ascending colon and joined this anastomosis. It was supplied probably by the two vessels mentioned above. Doubtless the obstruction at the orifice of the superior mesenteric artery had been of gradual development, at least up to a point, so that time had been allowed for the development of the anastomosing system, and thus all its branches and those of the cœliac axis had continued to receive a sufficient supply of blood with the exception of the splenic artery close to the spleen.

Whether this last was obstructed by embolism or, as is more probable, by thrombosis, it is impossible to say; but there is no evidence of embolism having occurred elsewhere, and the splenic artery was tortuous and sclerotic. It appears, therefore, more probable that the cause of the obstruction was a thrombosis occurring close to the spleen. In 1911 I reported, along with Dr. R. S. Taylor,[3] a case in which advanced disease of the splenic artery led to thrombosis and infarction of the greater part of the spleen. From this infarction, apparently, thrombosis had started in the splenic veins and spread until it involved the portal vein, and the patient died with acute symptoms of obscure character which were only explained post mortem. It is probable that something similar had occurred in the present case, though there is no record of any illness manifestly corresponding to such an occurrence.

In conclusion, it appears most probable that the patient was a chronic sufferer from splenomegaly of obscure nature and arteriosclerosis. The gradual occlusion of the superior mesenteric artery favoured the occurrence of thrombosis in the splenic artery, and the resulting infarction of the spleen led to portal thrombosis. The whole abdominal condition, then, might be described as a freak of arteriosclerosis producing a localised venous congestion, which in a number of other cases has been the only explanation which could be offered of polycythæmia.

A SERIES OF 236 CASES OF TOTAL ENUCLEATION OF THE PROSTATE PERFORMED DURING THE TWO YEARS 1911-12.

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IN a paper published by me in THE LANCET of April 8th, 1911, I reviewed the results of 800 cases of my operation of total enucleation of the prostate for radical cure of enlargement of that organ performed by me down to the end of 1910. During the two years that have since elapsed I have performed a further series of 236 cases of this operation. In the present paper I propose placing the results before the profession, giving in detail some cases mainly illustrative of the difficulties and complications met with in the operation, and winding up with a brief review of the 1036 instances of the operation completed by me at the end of 1912.

CASE 803.—On Dec. 12th, 1910, I saw, in consultation with Dr. P. Enrigue Caballero, *attaché à la Légation du Pérou*, a Peruvian patient, aged 67. A year previously he had suffered from hæmaturia and again five months subsequently. He consulted a medical man, who said he was suffering from tumour of the bladder. I introduced a catheter and drew off only three ounces of residual urine, which was mixed with blood, though the catheter passed in quite easily. On examination per rectum I was surprised to find that the prostate was enormously enlarged, rounded, smooth, soft, and movable. The patient being very stout, bimanual examination gave no additional information.

On Jan. 9th, 1911, I enucleated the prostate entire, Dr. Caballero being present. More than one-third of the mass, which was pear-shaped, lay in the bladder. Though very massive, weighing 7½ oz., the enucleation was quite easily accomplished, the operation lasting only three minutes. Recovery was uneventful, some urine passing per urethram on Jan. 25th, and the suprapubic wound being dry on Feb. 3rd. On Feb. 16th the patient left the surgical home in good health, able to pass and retain his urine, which was normal, as well as he ever did. Dr. Caballero informs me that he hears from Lima that the patient is quite well and that "the operation was a great success."

The remarkable feature of this case is that, though the prostate had attained to an enormous size, the enlargement was not accompanied by any of the usual symptoms resulting from obstruction with the exception of hæmaturia. The ease and rapidity with which a large prostate of this size was removed from a very stout patient are noticeable.

CASE 809.—On Jan. 27th, 1911, I saw, in consultation with Dr. Horace Duncan, a Church dignitary in his ninetieth year, who had suffered from the usual prostatic symptoms for 16 years, during the early years of which he had repeated attacks of retention of urine, relieved by the catheter. He had been entirely dependent on the catheter since 1905, and had had repeated attacks of cystitis and rigors with high fever. He also had had repeated attacks of orchitis. The bladder had been washed out daily for months; and he had had vaccine injections by an expert for three months, without any diminution in the symptoms. Dr. Duncan had for many years advised removal of the prostate, but the patient was dissuaded from this course by the surgeon consulted. When I saw the patient he was in such utter pain and misery that he begged for operation at any risk. I passed a catheter, which was introduced 16 inches before any urine flowed; six ounces of urine containing pus and blood came away. The prostate was of enormous size, filling the rectum and bladder, and felt bimanually to be of the size of an infant's head; it was quite soft and movable. The patient's general health was fair for his age, but the pulse was intermittent and irregular with high tension.

On Feb. 1st, Dr. Duncan assisting and Mr. Carter Braine being the anæsthetist, I enucleated the prostate entire into the bladder, but had then to break it in several pieces to deliver it through the suprapubic wound, which I had designedly made of limited extent. The weight of the prostate was 12½ oz. The operation was well borne; in fact, the patient scarcely seemed to feel it. No unfavourable symptom intervened, the patient being bright and cheerful throughout, sitting up in bed and reading from the second day after the operation. Some urine was passed naturally on Feb. 22nd and 27th, and afterwards the whole of the urine was passed per urethram. On March 10th the patient left the surgical home in fair health, retaining and passing his urine as well as he ever did.

CASE 858.—The patient, aged 68, was admitted to St. Peter's Hospital on June 11th, 1911, with an over-distended bladder from retention due to prostatic enlargement. Seven years previously he had had retention of urine, and the catheter had been employed for about a month; he went on fairly well without the catheter for six years after this. A year ago he had had hæmaturia for three or four days, and about monthly since then. Latterly the urine dribbled away from him, the overflow being due to over-distension of the bladder. He had had complete retention a week ago, and the catheter had been used daily since then. The pulse was rapid and intermittent, and he suffered from chronic emphysema and bronchitis. A small catheter was introduced and tied in, and the bladder was slowly drained. The urine was alkaline and contained much pus and albumin.

On June 14th I drained the bladder suprapubically, to relieve the backward pressure on the kidneys and allow the cystitis to pass off before enucleating the prostate. The condition of the patient gradually improved, and a fortnight afterwards, on June 28th, I enucleated the prostate, which weighed 3 oz. The anæsthetic was taken badly on both occasions. A rapid recovery ensued, notwithstanding the unpromising condition described, and the patient passed and retained his urine normally on and after July 19th. On the 27th he died suddenly from heart failure. He had been walking about for several days, and was to have gone home the day after the fatal occurrence.

This case illustrates some of the conditions under which it is advisable to operate in two stages, draining the bladder in the first instance to relieve the backward pressure on the kidneys and so enable them to regain their functions, as also to cure the cystitis, before enucleating the prostate. Though the death of the patient was due to heart disease, and occurred when he was quite convalescent from the operation, it must for statistical purposes be accepted in connexion therewith, though apparently quite independent thereof.

CASE 903.—On Nov. 14th, 1911, I saw, in consultation with Mr. J. J. Day, of Sandwich, a patient, aged 68, who had suffered from prostatic symptoms for five years and had been entirely dependent upon the catheter for a fortnight. There was much blood as well as some pus in the urine, and the catheter passed in some 13 or 14 inches before the urine flowed. The patient was extremely stout. On Nov. 16th I removed the prostate, weighing 3 oz., Mr. Day and Mr. Sydney B. Hulke being present. The operation was extremely difficult, chiefly owing to the stoutness of the patient, the abdominal fat being some 5 inches deep before the recti muscles were reached. The bladder wall was very thickened and its cavity contracted. These conditions necessitated extreme efforts to reach the distal aspects of the prostate by the enucleating finger in the bladder. The operation was well borne and the wound healed rapidly without any sloughing of the abdominal fat. On Dec. 8th some urine was passed per urethram, and the suprapubic wound was dry on and after the 18th. On Jan. 17th, 1912, the patient went home in excellent health, passing and retaining his urine normally. On March 5th, 1913, he wrote: "I am keeping wonderfully well, and have not had the slightest urinary trouble since I left No. 11 [the surgical home].

This case is recorded to illustrate the fact that enucleation of the prostate is feasible, though difficult, in extremely obese patients.

CASE 921.—This patient, aged 79, was admitted to St. Peter's Hospital on Jan. 9th, 1912, suffering from prostatic symptoms which had commenced some 26 years ago. He was in great distress, having to pass the catheter every hour almost by day and night. He was unable to pass any urine naturally, the catheter having been employed for 23 years. The introduction of the instrument was frequently attended by hæmorrhage, and the urine contained much pus and mucus; specific gravity, 1018.

On Jan. 18th I enucleated the prostate, which weighed 3½ oz., and presented a large median outgrowth in the bladder. A small phosphatic stone was removed from the bladder at the same time. On Feb. 12th the patient was discharged, able to retain and pass his urine naturally without the aid of a catheter as well as he ever did. On March 10th, 1913, he wrote to me: "I am glad to say I am a new man since you did the operation on me, before which I was using the catheter for

[3] Aneurysm of the Splenic Artery, Glasgow Medical Journal, April, 1911.

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23 years, and for two years before the operation I was unable to follow my occupation (clerk of works), but now I can go up ladders, &c., supervising the work as well as I could 20 years ago." This patient came to see me on March 17th, and I was surprised to see him, in his eighty-first year, looking as young and strong as a man of 55. His urine is normal, and is retained and passed normally.

The complete recovery of the bladder functions in this case after 23 years of "catheter life" is remarkable. I have previously recorded[1] a case in which on Nov. 17th, 1902, I removed the prostate weighing 6¾ oz. from a patient aged 66, who had been for 24 years entirely dependent upon the catheter. I am glad to say this patient was recently—

FIG. 1.

Jar containing 15 calculi, weighing ½ lb., removed from the bladder in Case 992. Actual size.

ten years after the operation—in fairly good health and able to retain and pass his urine naturally.

CASE 959.—A patient, aged 66, consulted me on April 29th, 1912, on the advice of Dr. T. M. Tibbetts, of Old Hill, Staffs, suffering from prostatic symptoms which had existed for 12 years, gradually increasing in intensity. For months previously he had had the catheter passed three times daily at a hydropathic institution, but latterly he did not employ the catheter. The bladder was greatly over-distended, the patient having to pass urine hourly by day and by night. During the previous three months he had suffered from extreme thirst, headache, bitter taste in the mouth, with gradual loss of energy and appetite—symptoms which indicated uræmic poisoning. I drew off 32 ounces of residual urine, colourless like water; specific gravity 1006, and containing a trace of albumin. The prostate felt much enlarged, dilated, dense, and movable. Owing to the uræmic symptoms I decided to drain the bladder suprapubically before removing the prostate, so as to relieve the backward pressure on the kidneys and thus enable them to regain their functions.

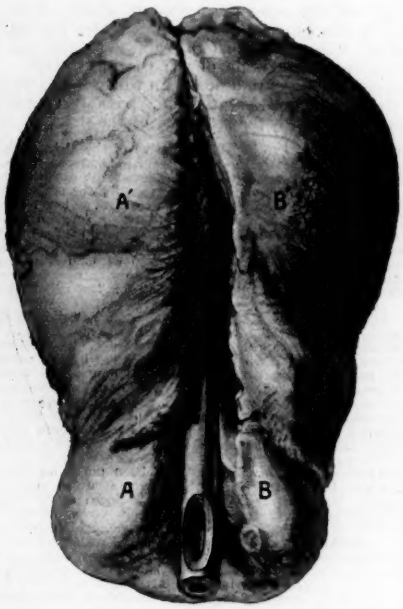
[1] Surgical Diseases of the Urinary Organs, Baillière, Tindall and Cox, Case 24, p. 126.

Assisted by Dr. Tibbetts, I performed suprapubic cystotomy on April 30th, and found that the prostate presented a tongue-shaped outgrowth in the bladder. The previous uræmic symptoms continued for some days and troublesome hiccough supervened; but all these symptoms gradually subsided, so that on May 14th, assisted by Dr. Tibbetts, I was able to complete the operation. The prostate, which was pear-shaped and weighed 3 oz., was easily enucleated. The suprapubic wound was completely closed on May 31st, and on June 15th the patient went home in excellent health, able to retain and pass his urine as well as he ever did. On March 6th, 1913, he wrote to me: "I never felt better in my life; I have never since had any pain or inconvenience my urinary flow is perfect and my appetite splendid."

This is a typical example of one of the few conditions under which it is advisable to divide the operation into two stages, so that the uræmic symptoms may pass off and the kidneys regain their full excreting powers before removing the prostate. Had the gland been removed without preliminary drainage in this case, the shock to the maimed kidneys would probably have induced total suppression of the urine.

CASE 992.—A patient, aged 72, consulted me on July 22nd, 1912, on the advice of Dr. T. H. Macfie, of Bognor. He had suffered from urinary symptoms for 20 years, during which he had from time to time

FIG. 2.



Prostate, weighing 3½ oz., removed from patient aged 72 (Case 992). Actual size. A', B', Left and right lobes respectively, with their continuations, A, B, forming a shovel-like outgrowth in the bladder.

passed small urate calculi, sometimes as large as a pea. For years he had had occasional stoppage of urine, hæmaturia, and pains in the loins, attributed to "neuritis." Four years ago he was sounded by a surgeon, but no stone was detected; no urine, only blood, was drawn off. During the past month he had suffered intense agony night and day, with constant straining to pass urine, accompanied by burning pain along the urethra. His health was much impaired from want of sleep; he was very stout, and he suffered from chronic catarrh of the lungs. I introduced a bi-coudé catheter and drew off 6 ounces of residual urine, very offensive, containing pus, mucus, and blood. With the soft catheter I felt stones in the bladder. Per rectum the prostate was enlarged and of the usual adenomatous type.

On July 24th I opened the bladder suprapubically, Professor Georges Gayet, of Lyons, being present, and found it crowded with calculi, a few lying loosely, but the majority jammed tightly against each other and facetted, like paving-stones in a street; or rather the base of the bladder felt like an inverted stone arch. In order to loosen and dislodge the stones I had to introduce a blunt chisel between the keystones, as it were. There were 15 calculi, urates covered by phosphates, all more or less facetted and uniform in size, each as large as a chestnut, the whole weighing just ½ lb. (Fig. 1). Having cleared the bladder of calculi, I then enucleated the prostate (Fig. 2), which weighed 3½ oz., with considerable difficulty, owing to the stoutness of the patient and the gland being pushed towards the rectum by the quarry of stones in the bladder. The operation was well borne and the patient made an uninterrupted recovery, some urine passing naturally on August 10th and the suprapubic wound being dry on the 17th. On Sept. 16th the patient left London for home in the country in very fair health, free from urinary troubles, and able to retain and pass urine as well as he ever did. On March 5th last he paid me a friendly visit. He is now in excellent health, untroubled by any urinary

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symptoms, and travels 50 miles from his country place to London to attend to business several times a week.

CASE 1003.—A patient, aged 52, consulted me on Sept. 27th, 1912, on the advice of Dr. James Massey, of Pendleton. As a boy he had had difficulty in micturition, the stream being very thin. He had had gonorrhœa twice in his youth, complicated by orchitis. Seven years ago he had intense frequency of micturition, only a small quantity of urine being passed each time. A catheter was introduced and he was subsequently extremely ill from cystitis accompanied by high fever. Since then he had been entirely dependent upon the catheter. Latterly he had had great difficulty in introducing the catheter, even when armed with a stylet, and blood was frequently drawn. His object in consulting me was to deal with the stricture, so as to enable him to pass the catheter with ease, not with the hope of ever passing his urine naturally unaided by an instrument. With considerable difficulty I introduced a No. 6 coudé catheter and drew off 7 oz. of residual urine. I found that in addition to the stricture, which was deeply situated, his prostate was enlarged to the size of a Tangerine orange, very dense but movable.

On Sept. 30th I performed internal urethrotomy, so that a No. 16 steel sound passed with ease. The bladder was then opened suprapubically and the prostate, weighing 2¼ oz. and presenting a finger-like projection in the bladder, was enucleated. It was very tightly bound round by the surrounding sheath. The patient made an uninterrupted recovery, the suprapubic wound being completely dry on Oct. 16th. On the 25th he left for home able to retain his urine for from six to eight hours, and to pass it in full stream. He was in excellent health and spirits, for, as already mentioned, he had not anticipated being ever able to dispense with the catheter.

This case illustrates the procedure adopted when enlargement of the prostate is complicated by stricture of the urethra. The early age (45 years) at which the enlarged prostate caused retention of urine is remarkable. This was probably due to the tightness with which it was bound down by the enveloping sheath and, possibly, partly to the irritation caused by the proximity of the stricture.

CASE 1004.—A patient, aged 71, a native of the Colombian Republic consulted me on Oct. 1st, 1912. He had suffered from prostatic symptoms for 20 years, but had employed the catheter during the last six months only, and merely occasionally for retention of urine. He had considerable hæmorrhage six years ago, and was examined for stone, with negative result, by a well-known surgeon in Paris. He had also recently been under the care of a Berlin surgeon. Urine was passed every half hour to two hours night and day, accompanied by much difficulty and pain. I drew off 15 oz. of residual urine containing much pus, and sounded for stone with negative result. The prostate was felt greatly enlarged and of the usual adenomatous type.

On Oct. 7th I enucleated the prostate entire, weighing 4½ oz., the operation lasting three minutes. There was a thumb-like process projecting from the right lobe into the bladder. The patient took the anæsthetic badly and the operation was followed by considerable shock, which, however, passed off in a couple of hours. He began to pass urine per urethram on Oct. 21st, and three days later the whole of his urine was passed in this way. He left the surgical home on Nov. 3rd in good spirits, able to retain and pass urine as well as he ever did. This patient called to see me some weeks after, before his departure for South America, and I found him in excellent health, untroubled by any urinary symptom.

CASE 1006.—This patient, aged 84, had been under my care in May, 1902, when I removed by litholapaxy a urate stone weighing 446 grains. His prostate was somewhat enlarged at the time, but did not trouble him. For the past five or six years, however, he had suffered from the usual prostatic symptoms, which gradually grew worse, culminating in complete retention of urine five months ago. The practitioner called in failed to pass a catheter, so he was sent to a surgical home at Eastbourne, where suprapubic cystotomy was performed by a surgeon, but it was not thought advisable to attempt removal of the prostate. A suprapubic fistula was established, through which he had since passed the whole of his urine.

The patient was in a very miserable condition when he consulted me (Oct. 3rd, 1912), in great pain, and constantly wet, as the urine flowed beside the apparatus. The urine contained much thick mucus, pus, and a considerable quantity of sugar. Though in broken health the patient begged me to remove the prostate at any risk, as he said life was not worth living in his present state.

On Oct. 9th I opened the bladder by a horseshoe incision across the fistula above the pubic arch and enucleated the prostate, which weighed 5½ oz., with much difficulty—a difficulty which is invariably encountered when a fistula has previously been established owing to the unyielding nature of the scar tissue preventing the enucleating finger from advancing freely to the distal aspect of the prostate. The patient was very sick for two or three days after the operation, but the nausea and vomiting gradually passed off. The wound was slow in closing, some urine being passed naturally on Oct. 29th, and the wound being dry by Nov. 17th. On the 28th he left the surgical home for Eastbourne, able to retain and pass his urine as well as he ever did. On Feb. 10th, 1913, he wrote to me stating that he was quite strong, able to walk out daily, and to retain and pass his urine normally without any trouble.

CASE 1031.—In November, 1912, I was summoned to Spain to see a Spanish patient in consultation with Dr. Areliza, of Bilbao; but being unable at the time to leave England the patient came to London, accompanied by Dr. Louis de Larrinaga, of Bilbao. The patient was 63 years of age and had had lithotrity performed in Madrid in 1903. Seven years ago he had retention of urine, which was relieved by the catheter. During the last few months he had had intense pain and frequency of micturition. The residual urine was 6 oz. and contained pus, mucus, and blood. On sounding I felt calculi free in the bladder. The prostate was enlarged, bilobed, very dense but movable.

On Dec. 4th, assisted by Dr. Larrinaga and Mr. J. F. O'Malley, Mr. C. Braine being the anæsthetist, I opened the bladder suprapubically and removed 32 calculi, each about the size of a pea, the whole weighing 3½ drachms; they were composed mainly of urates covered by phosphates. I then enucleated the prostate, which was of the size of a Tangerine orange and weighed 1½ oz. There was practically no hæmorrhage or shock. The patient made an uninterrupted recovery, commencing to pass urine per urethram on Dec 15th and the suprapubic wound being dry on the 20th. On Jan. 1st, 1913, the patient sat up to dinner. He remained in London for some weeks, during which I had to wash his bladder out for the cystitis that had existed for years. He is now travelling in Italy, and on March 15th I had a letter from Rome saying that he was in perfect health untroubled by any urinary symptom.

There were in connexion with these 236 operations 11 deaths, or 4·66 per cent.

Reviewing briefly my experience of this operation to the end of 1912, comprising 1036 cases, the patients varied in age from 49 to 90 years, with an average age of 69½ years. There were amongst them 65 octogenarians and 11 bordering on this age—viz., 79 years. The prostates removed ranged from ½ to 17 oz. in weight, the approximate average being 2¾ oz. Though the patients were, of course, mainly drawn from the British Isles, practically every nation and race on the face of the earth are here represented. The great majority had been dependent on the catheter for periods ranging from a few days to 24 years. Most of them were in bad health and many were apparently moribund when the operation was undertaken. Few of them were free from one or more grave complications, kidney affections resulting from backward pressure on those organs predominating. In the larger number existence was rendered so painful and miserable that they were prepared to face any risk from operation provided they could be assured that in case of survival they could dispense with the catheter.

In connexion with these 1036 operations there were 57 deaths, or 5½ per cent., the remaining 979 cases, with the exception of one case, being completely successful. In only this one case has the patient failed to regain the power of voluntary micturition, and in this instance the bladder was quite flaccid and seems to have been completely paralysed by the extreme over-distension by the urine before the catheter was employed. With experience the mortality has gradually diminished from about 10 per cent. in the first 100 cases to a little over 4½ per cent. in the last 400.

The causes of death were: uræmia due to chronic kidney disease, 24; heart disease, 9; shock, 7; exhaustion, 3; septicæmia, 3; mania (hereditary in one case), 2; malignant disease of the liver, 2; bronchitis, 2; pneumonia, 1; heat-stroke, 1; pulmonary embolism, 1; cerebral hæmorrhage with paralysis, 1; and acute pancreatitis, 1. Though all these deaths are accepted in connexion with the operation, in not more than half the number can the fatal result be attributed thereto, the remaining deaths, as in Case 858, above recorded in detail, being due to disease incident to old age and unconnected with the operation. Had the cases been selected the mortality would have been infinitesimal, but, as will have been gathered from the successful cases given in detail in my numerous papers which have appeared in THE LANCET and *British Medical Journal* during the last 11 years, selection would have condemned a large proportion of them to a painful death after prolonged suffering instead of the complete restoration to health that ensued after the operation.

In 190 cases the prostatic disease was complicated by the presence of stone in the bladder, mostly of the phosphatic variety due to cystitis. The operation in these cases partook, of course, of a dual character—prostatectomy in addition to suprapubic lithotomy. Amongst these there were 16 deaths (all of which have been accepted as resulting from the prostatectomy part of the operation), or 8·42 per cent. Amongst the remaining 846 cases uncomplicated with stone there were 41 deaths, or 4·84 per cent., so that the mortality amongst the former was nearly double that amongst the latter.

One of the most satisfactory features of this operation is that the patients as a rule state, after the lapse of months or even years, that they feel from 10 to 20 years younger than before the operation. This remarkable rejuvenescence has so much impressed me that, apart from the physical pain and mental depression caused by the obstructive symptoms, I am persuaded that the enlarged gland pours into the system some internal secretion of a toxic or deleterious nature.

In my first paper on this subject, published in the *British Medical Journal*, July 20th, 1901, in which I introduced to the notice of the profession my operation of total enucleation

of the prostate, with details of four successful cases, I wrote:

These four operations have completely revolutionised my views with regard to the treatment of this painful and widespread malady, and I submit that the complete success with which they have been attended opens up a new and promising era in this field of surgery with far-reaching results ..... that we have at last arrived at a rational method of dealing with this painful and frequently fatal malady.

I have the pleasure to state that three of these patients were recently alive, two of them in perfect health, one suffering from heart disease, but all three free from urinary troubles, as they have remained since operation. I submit that the forecast embodied in the above words has been fully justified by the facts and statistics placed before the readers of THE LANCET in this and previous papers, and by the almost universal adoption of my operation by surgeons all over the world.

Harley-street, W.

CONGENITAL STRICTURE OF LOWER END OF ŒSOPHAGUS.

CASE TREATED BY GASTROSTOMY, FOLLOWED BY DILATATION OF THE STRICTURE THROUGH THE ŒSOPHAGOSCOPE.

BY RUTHERFORD MORISON, F.R.C.S. ENG. & EDIN.,
PROFESSOR OF SURGERY, UNIVERSITY OF DURHAM; SENIOR SURGEON, ROYAL VICTORIA INFIRMARY, NEWCASTLE-ON-TYNE;
AND
HAMILTON DRUMMOND, M.B., B.S. DURH., F.R.C.S. EDIN.,
SURGICAL REGISTRAR TO THE INFIRMARY.

THE subject of this note, when first seen in August, 1911, was an extremely emaciated, light-haired boy, aged 3 years. He was the only child of elderly parents, and since he was three months old had had difficulty in swallowing. During the last three months he had become much worse, "vomiting" almost immediately after everything he took. The child was ravenous, always crying for food, and on giving him a plate of mince he would eat a few spoonfuls, "vomit" most of it back almost immediately, and at once commence to eat again. This would continue until the food was finished. His hunger was appeased for a short time only, and he soon began to clamour for more. "Vomiting" occurred equally with fluids as with solids. His weight was 1 st. 6 lb. An X ray photograph (with bismuth porridge) showed a stricture of the œsophagus at the upper border of the tenth dorsal vertebra.

On August 20th, 1911, a general anæsthetic was administered and an attempt made to pass a soft catheter into the stomach. It is unlikely that it ever got there, but whether or no, on his return to the ward shortly after he pulled the catheter out during the time he was coming out of the anæsthetic. He continued to lose weight, in spite of his endeavours to eat and of enemata which he retained well.

On Sept. 2nd gastrostomy was done by Professor Morison after the Kader Senn method, and contrary to expectation the stomach was not atrophied and was easily brought into the wound; a No. 10 English catheter was inserted through the pylorus into the duodenum, as Mr. Morison always does when performing gastrostomy. On Oct. 7th an attempt was made to pass a ureter catheter through the stricture from below by means of a cystoscope through the gastrostomy opening. This, however, was unsuccessful on two occasions, and further attempts at bougie treatment under an anæsthetic and the swallowing of thread from above failed. The child steadily and rapidly improved, and on Oct. 31st returned home weighing 2 st. 1 lb.

Nothing more was heard of the boy until November, 1912, when he was readmitted for further treatment of the stricture. The child's general condition was remarkably good. He had grown considerably, and now looked a normal healthy child. The gastrostomy opening was still his sole resource for feeding, as he "vomited" everything he took by the mouth as before.

On Nov. 14th, 1912, under chloroform anæsthesia, the œsophagoscope was passed (Hamilton Drummond). The pharynx and œsophagus were found to be so filled with retained saliva and curdled milk that nothing was visible till this was entirely cleaned away. The œsophagus was then seen to be considerably distended, but except for a few mucus patches near the cardia the mucosa presented a normal appearance. A stricture was seen in the position indicated by the X ray photograph at a distance of 26 cm. from the incisor teeth. It looked like a pucker with a small central depression. A fine, stiff, whalebone bougie of the calibre of a ureter catheter was passed down through the œsophagoscope into the depression, and after a little coaxing it entered the stomach. The bougie was guided altogether by sight. After this, in the same way, a No. 6 graduated gum-elastic bougie was passed into the stomach and then a No. 8. A fair amount of pressure was exerted in order to induce the last bougie to enter the stomach, and it was left *in situ*. To ascertain if the last bougie was in the stomach the œsophagoscope was inserted through the gastrostomy opening, the smallest Brüning tube being used for this purpose, and the presence of the bougie there was verified. The bougie, fixed with tapes around the child's head, was left *in situ* for four hours. From this date the child swallowed liquids well, only "vomiting" occasionally.

On Nov. 28th chloroform was again administered, and the stricture was examined with the œsophagoscope. It was found to be considerably dilated, and the opening had now reached about the size of a goose quill. A No. 9 graduated gum-elastic bougie was passed through it into the stomach and left *in situ* for six hours. An attempt was made to bring this bougie out of the gastrostomy opening by means of the œsophagoscope passed through the gastric fistula, but this could not be accomplished. Nothing more was done until Dec. 12th, when a No. 15 bougie was passed and left *in situ* for two hours, the child in the meantime having only "vomited" on a single occasion, and then after eating an apple. Bougies were now easily passed once a week without an anæsthetic.

On Jan. 7th, 1913, the œsophagoscope was again introduced under chloroform anæsthesia. The œsophagus was greatly reduced in size (by at least half), no longer contained any retained secretions, and the strictured portion appeared to be large enough to admit the tip of a little finger. The report of Jan. 10th stated that he was then able to eat solid food and never "vomited." He had had nothing by the gastrostomy wound for a month. A No. 16 gum-elastic bougie could be passed into the stomach without any difficulty, and he had been allowed to go home. During March the child continued to improve, and the mother was able to pass a No. 12 bougie without the least trouble. The gastrostomy wound had been allowed to heal up.

Remarks by Professor RUTHERFORD MORISON.—I have asked Mr. Hamilton Drummond to report this case as, apart from the interest of it and the remarkably successful result attributable to his skill, it is an exceptionally convincing example of the use of the œsophagoscope, for without this the patient would have been condemned to an unnatural lifelong disability. We are all here indebted to Mr. C. W. M. Hope, of King's College Hospital, London, for a knowledge of this instrument, for he gave a demonstration of its use before the Northumberland and Durham Medical Society one day (Dec. 14th, 1911) and on the next safely and successfully extracted a tooth plate from the œsophagus of a patient who was admitted to my clinic during his visit. Coin-catchers, sponge and umbrella probangs, and other such devices are now, in medical centres at least, obsolete and dangerous instruments. The œsophagoscope should have taken the place of all of them.

Newcastle-on-Tyne.

BRITISH OTO-LARYNGOLOGICAL SOCIETY.—A meeting of this society was held at the rooms of the Medical Society of London, Chandos-street, W., on April 3rd. It was then decided that the society should have no president, but that a chairman be elected at each meeting. The following gentlemen were appointed members of council:—Metropolitan: Dr. Frederick Spicer, Mr. Charles Heath, Dr. J. Coubro Potter, and Dr. L. Hemington Pegler. Provincial: Mr. George Jackson (Plymouth), Dr. Barclay J. Baron (Bristol), Dr. T. H. Livingstone (Newcastle), Dr. Oliver St. J. Gogarty (Dublin), Dr. J. Walton Browne (Belfast), Dr. James Harper (Glasgow), Mr. George Potts (Maidstone), Mr. A. Adair Dighton (Liverpool), Dr. N. C. Haring (Manchester), and Dr. Andrew Little (Bradford). Dr. Percy S. Jakins was elected honorary treasurer, and Mr. J. Walker Wood honorary secretary.

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THE RECORDS OF FOUR UNUSUAL RECOVERIES IN CASES OF MENTAL DISEASE.

BY LEWIS C. BRUCE, M.D. EDIN., F.R.C.P. EDIN.,
MEDICAL SUPERINTENDENT, PERTH DISTRICT ASYLUM, MURTHLY.

THE records of the four following cases are of interest in so far that they demonstrate that even apparently hopeless cases of nervous and mental disease can never be safely pronounced incurable.

CASE 1.—The patient, a male, aged 30, labours under a mild type of imbecility, and was up to eight years ago a confirmed epileptic. His history states that his epileptic seizures commenced during infancy. When he first came under my care in 1899, and up to 1904, his epileptic seizures were very frequent, averaging between 200 and 300 each month. The fits were both diurnal and nocturnal. During 1904 certain serum observations were made in order to test a statement made by Ceni to the effect that the serum of epileptic patients when taken from the body develops certain antibodies which when injected subcutaneously into the patient yielding the serum, or into other epileptic patients, have a curative power. The patient being the most consistent sufferer from epilepsy under my care at the time was asked to give serum for the purposes of the observation. This he readily agreed to do. During a period of six weeks blood to the amount of 40 c.c. was drawn from the median basilic vein once a week, so that during the six weeks he yielded 240 c.c. of blood. The curious fact is this, that from the day of the first bleeding up to the time of writing—that is to say, during a period of eight years—the patient has never again suffered from a single epileptic seizure. I have often speculated whether his recovery from epilepsy was a coincidence or the result of the venesection. Similar venesection in other cases of epilepsy certainly did not improve the epileptic condition. It is to be noted that the patient never received an injection of his own or any other patient's serum.

CASE 2.—The patient is a woman who when she first came under my care was 57 years of age. She suffered from recurrent attacks of *folie circulaire* mania with barely recognisable periods of depression. Each of the attacks of excitement lasted about six weeks, with varying intervals of sanity. The history of her illness is as follows. Her first attack of excitement recorded occurred when she was 27 years of age. The first record of her admission to an asylum was in June, 1892, and she was discharged in September of the same year. She was readmitted in February, 1897, and redischarged in April of the same year. She was again admitted in August, 1900, and discharged in January, 1901. Her last admission, when she came under my care, was in October, 1901. During 1902, 1903, 1904, and 1905 she suffered from frequent attacks of mania, the onset of each attack being preceded and accompanied by an attack of nasal catarrh. She presented no other physical symptoms beyond a recurring hyperleucocytosis of from 12,000 to 20,000 per cubic millimetre which accompanied the attacks, and the presence of a specific agglutinin in her serum to a variety of streptococcus isolated by myself from the blood of a case of acute mania. Her opsonic index to the same organism varied between 0·4 at the commencement of an attack to 2 at the termination of an attack. Various attempts were made by means of injections of this streptococcus to produce immunity, but without effect, and no antibacterial substance could be demonstrated in her serum as the result of these injections.

In October, 1905, it was decided to try the effect of feeding the patient on living cultures of the streptococcus which her serum agglutinated. The organism was grown in sterilised broth for 48 hours at 37° C. and then dispensed in 10-ounce bottles, of which she took 1 oz. thrice daily between meals, and this course was continued for six weeks. During this period her appetite increased very markedly, and her weight went up from 10 st. 1 lb. to 11 st. At the end of the six weeks' course of treatment her serum was tested for immune body and was found to contain a specific bacteriolytic substance, which was demonstrated as follows. One part of a 24 hours' broth culture of the streptococcus was mixed with two parts of her serum; the mixture was drawn into a sterile pipette, which was sealed and placed in the incubator at 37° C. for three hours. A control of the serum of a healthy person was made at the same time. At the expiration of the three hours the contents of each pipette were spread on agar tubes and incubated. At the end of 24 hours' incubation it was found that in the tube inoculated from the patient's mixture of serum and broth culture there were only three colonies of organisms visible, while that inoculated with the pipette made from the control serum showed countless colonies. To prevent error the observation was repeated with a second control with the same result. From the date of treatment in October, 1905, to the date of discharge, December, 1907, the patient never suffered from another attack of mania, and up to the time of writing she has not had a relapse.

I naturally thought that I had hit upon a discovery in treatment, but this proved incorrect, as out of six other and similar cases so treated I obtained no satisfactory results, nor was bacteriolytic substance ever demonstrated in the sera of these patients. If this recovery was not the result of the feeding with streptococci, but a coincidence, then we must accept the presence of antibody in the serum as an indication of the method nature takes to arrest such conditions of disease. If, on the other hand, we accept the recovery as the result of feeding with bacteria, it is curious that other and apparently similar cases did not benefit by the same treatment.

CASE 3.—The patient is a woman aged 32. She developed melancholic symptoms, with fixed delusions and marked impairment of nutrition at the age of 30. She was treated for two years, partly at home and partly in an asylum, without apparent benefit, and was admitted to Murthly in October, 1908. Her nutrition was miserable; she was depressed, took no interest in her surroundings or personal appearance, and expressed fixed delusions. She presented no physical disorder beyond the condition of malnutrition, a dry harsh skin, want of appetite, constipation, and an irregular hyperleucocytosis of from 12,000 to 17,000 per c.mm., the increase being chiefly in the polymorphonuclear cells. All sorts of remedies were applied in her case; she was treated with thyroid, hot baths, injections of cinnamate of soda and various vaccines with practically no effect; the prognosis given in her case was most unfavourable. At the end of March, 1910—i.e., four years after the onset of her illness—she contracted scarlet fever. The fever was of a mild type with little constitutional disturbance, the highest temperature recorded being 101° F. As she convalesced from the fever a marked physical and mental improvement was noticeable, and by the end of April she had recovered. She was discharged at the end of May, 1910, and has shown no signs of relapse up to the time of writing.

I have seen an attack of scarlet fever in recent and hopeful cases of mental disease hasten recovery, but this is the only case I have seen of scarlet fever occurring in what was, to all intents, a chronic case of insanity.

CASE 4.—The last case is possibly the most interesting of the four. It is that of a woman, aged 27, who became insane in May, 1904, and was removed to a large city asylum. What the nature of the early attack was I do not know, but when she was transferred to Murthly, in November, 1904, she was a morose, impulsive, absolutely intractable woman. She suffered from delusions of identity, she had her own names for members of the staff and for some of her fellow patients, and she referred to these persons as to individuals whom she had known all her life. She fell into the routine of the house, in so far that she went to the dining-hall for meals, to church and social functions, but she could not be employed in any way. At frequent intervals she was impulsive, suddenly attacking fellow patients or members of the staff, and these attacks were, so far as one could judge by her disjointed speech during these outbursts, directly the result of the delusions of identity she laboured under regarding the persons she assaulted. No observations could be made with regard to her physical state on account of her impulsiveness, and no attempts at treatment met with success for the same reason.

No change was noted in her condition until May 5th, 1908, when she was reported as having been found in an unconscious state in her bed in the morning. Upon examination she presented all the symptoms of a cerebral hæmorrhage, being completely paralysed on the right side. When she recovered consciousness it was also noted that she was

aphasic. Following upon the seizure she developed a high temperature, which ran as high as 104° F., and this pyrexia, which was remittent in character, lasted for three weeks. At the end of the three weeks the paralysis was passing off and the power of speech was returning. Five weeks after the date of onset of the seizure she spoke to me quite clearly and collectedly. She asked where she was, how long she had been at Murthly, and how she came to Murthly. Further inquiries elicited the fact that her mind was a perfect blank for a period of four years—that is to say, from the date of the onset of the attack in May, 1904, to the convalescence from her cerebral hæmorrhage in June, 1908. She knew no one; the medical men, the nurses, and her fellow patients were to her complete strangers. When she was able to get up and go about the ward she recognised nothing; she had to be shown her way to the dining-room, the chapel, and recreation hall, and she had no recollection of her violent and impulsive behaviour, and yet from her admission in November, 1904, she was apparently conscious, in so far that she knew what was said to her and obeyed orders. Although she called the nursing staff by names of her own she never confused these names and she certainly knew her way to the dining-hall, the recreation hall, and her own bed in the dormitory. She made an excellent recovery, was discharged in July, 1908, and went into service. Up to the present date she has not been readmitted into this asylum.

Her mental states suggested a condition of dual personality, and to me it is quite inexplicable that an apparently hopeless case of insanity should suddenly recover as the result of a cerebral hæmorrhage followed by three weeks of almost hyperpyrexia.

Murthly.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

NOTE ON A CASE OF OBSTINATE SCIATICA TREATED BY PHENAZONUM INJECTIONS.

BY LEWIS W. REYNOLDS, M.R.C.S. ENG.,

SURGEON TO THE HIGH WYCOMBE COTTAGE HOSPITAL.

THE treatment of obstinate sciatica is attended with so many difficulties that the success by Tubache's method may be of interest.

The patient, aged 66, a man of robust constitution, weighing 15 st., came under my care on August 30th, 1912. He had had a sharp attack of sciatica in 1886 and was quickly cured by the baths of Hammam R'Irha, Algiers; again in 1905 he was apparently cured of another attack by visiting the same baths. An attack in September, 1911, was greatly relieved by three weeks of Harrogate treatment—baths, massage, electricity, &c. In June, 1912, after a sharp attack of lumbago a more severe trouble arose from a return of the sciatica. Three weeks in Droitwich, baths, massage, and Aix douche, made the patient's condition steadily worse. He returned home and took to his bed on Sept. 3rd. The daily application of an electric light bath was tried, as well as blisters along the course of the sciatic nerve, salicylates, iodide of potassium, and other remedies, but he continued to experience the most acute pain on the slightest movement. He could only lie on his left side, the sciatica affecting his right leg from thigh to foot. On Sept. 21st I commenced the deep hypodermic injections of the following: phenazonum, ʒ iiss.; cocain. hydrochlor., gr. iiss.; aq. destill. steril., ʒ iiss., 1 c.cm. (♏ xv.) of the preparation being injected into the upper part of the thigh over the nerve. These injections were repeated at different places along the course of the nerve on Sept. 23rd, 25th, and 27th, and on Oct. 3rd, 7th, 9th, 13th, and 17th. The injections caused no pain at the time, but invariably about six hours afterwards a great deal of pain was experienced, which lasted some hours and sometimes necessitated an injection of morphine. There was no great relief from the treatment until Oct. 12th, but the nearer the injection got to the nerve the greater the relief seemed to be. For instance, the injection over the external popliteal behind the head of the fibula gave great relief, and another injection on Oct. 13th on the dorsum of the foot completely removed the pain after four hours, and it has not returned. After Oct. 12th the patient rapidly improved; the pains ceased and movement became easy. About this time some anxiety was felt because of some slight cardiac trouble, causing a slow and intermittent pulse, but a mixture of strychnine and digitalis put this right again. Since Oct. 28th the patient has gradually resumed his habits, and he only experiences a considerable stiffness in his right leg. The power of walking is gradually improving.

High Wycombe.

NOTE ON THE USE OF TUBERCULIN.

BY BERTRAM COHEN, M.B., B.S. LOND.,

LATE HOUSE SURGEON, HOUSE PHYSICIAN, AND ASSISTANT CURATOR, ST. GEORGE'S HOSPITAL.

WHILE so much literature is appearing advocating on the one hand and criticising on the other the use of tuberculin in the treatment of pulmonary tuberculosis, the following case may be of interest.

The patient, a man aged 21, was seen by Dr. W. F. Colclough and myself for the first time on Jan. 11th, 1913, complaining of abdominal pain over the region of the appendix. The whole of the right side of the abdomen was rigid and painful, but there was diminished resonance and air entry into the base of the right lung. On Jan. 14th there was definite evidence of fluid in the right chest; the abdominal symptoms had disappeared, having been due to inflammation of the diaphragmatic pleura. On the 17th the right chest was aspirated; 16 oz. of clear fluid were drawn off, a good deal more being left to absorb. The case was clearly one of tuberculous pleural effusion. The temperature did not fall, varying in the evening between 100° and 101°, and the fluid showed no signs of absorbing. On the 23rd the patient was given 1/10000 T.R. During the next two days the temperature for the first time fell below 99° F. On the 25th the evening temperature was 99·4°. On the 26th 1/10000 T.R. was repeated. The next day the temperature remained normal, but only to rise to 99·8° the day after. This was because 1/10000 was too small; 1/8000 ought to have been given. On the 29th he was given 1/7500; the temperature at once dropped to 98°, where it remained until his discharge, not fluctuating more than 0·2 of a degree.

The patient left hospital on Feb. 10th well and markedly improved in general health. There is every reason to believe that if he takes tuberculin for the next six months he will not develop phthisis, in spite of the fact that he has had a tubercular lesion.

I have found that the administration of tuberculin T.R. is of the utmost value in the treatment of pulmonary tuberculosis, and cannot too strongly emphasise the teachings of Dr. Arthur Latham that the two cardinal rules are: (1) start with a small dose; and (2) carefully watch the temperature, the amount of expectoration and clinical symptoms, and judge the time for giving and spacing of doses accordingly.

Sidmouth.

THE CHADWICK PUBLIC LECTURES.—Three evening lectures, with epidiascope illustrations, on the Evolution of Epidemics, are now being delivered at the house of the Royal Society of Medicine, 1, Wimpole-street, W. The first lecture, entitled "Middle Ages—Evolutionary Factors in Evidence," was delivered last Monday by Dr. H. T. Hewlett, in the unavoidable absence of Dr. J. T. C. Nash, medical officer of health for the county of Norfolk. The second, entitled "Nineteenth Century—Specificity and Evolution," and the third, entitled "Present Day—Scientific Evidences of Evolution," will be delivered on Mondays, April 14th and 21st, at 8.15. Admission to the lectures is free, and further information regarding the Chadwick lectures may be obtained from the secretary, Mrs. Aubrey Richardson, at the offices of the Trust, 8, Dartmouth-street, Westminster.

Medical Societies.

LIVERPOOL MEDICAL INSTITUTION.

Graves's Disease.—Appendicitis in Children.—Meningitis Serosa.

A MEETING of this society was held on March 27th, Mr. ROBERT JONES, the President, being in the chair.

Mr. COLIN CAMPBELL read a note on Four Cases of Graves's Disease treated by Fresh Thyroidectomised Goats' Milk. Reference was made to the mortality from disease of the thyroid (cancer excluded) in the Registrar-General's Reports. In 1900 the deaths numbered 227; in 1910 they had increased to 551. Neither Graves's disease nor exophthalmic goitre was mentioned in the reports, but Mr. Campbell had been officially informed that the number of deaths attributed to it was: in 1910, 390; and in 1911, 411. Obviously the disease was increasing and did not "tend to get well." Non-recovery was the rule, whilst deaths were more frequent than cures. His experience of the various sera had been unfortunate. The cases treated with fresh milk had improved comparatively quickly. One, he might say, was cured. It was possible that much of the benefit from the use of the goats' milk might be due to its nutritive qualities rather than to its antithyroid action.—Mr. C. THURSTAN HOLLAND had treated 50 cases of Graves's disease by X rays with satisfactory results, and thought that method much more reliable than any other.—Dr. W. B. WARRINGTON thought that Mr. Holland had made out a case for X ray treatment, but said that all remedies that had been tried and vaunted were ultimately found unsatisfactory.—Mr. KEITH W. MONSARRAT had seen surgical treatment very successful in properly selected cases.—Mr. E. T. DAVIES and Dr. J. R. LOGAN also spoke.

Mr. G. C. E. SIMPSON read a paper on Appendicitis in Children. In the records of the Liverpool Infirmary for Children there was no case of appendicitis, perityphlitis, or pericolitis recorded from 1876 to 1891, and from 1884 to 1891 only two cases of abdominal abscess led to a fatal result among an annual average of 15,000 patients. In 1892 a case of iliac abscess was recorded, and from that time there had been a steady increase in the frequency of these cases; in the last five years there had been an average of 24 cases per annum, the figure rising to 34 in 1910–11. The average death-rate was high, being 23 in 160 cases, or nearly 15 per cent. Mr. Simpson had himself treated 34 cases and urged that the disease was increasing in frequency and in severity, so that no opportunity should be lost of impressing on the public the importance of abdominal pain in a child. He urged on the medical attendant the advisability of early operation, as in children there was even less tendency to localisation of the disease to the appendix than in adults.—Mr. A. STOOKES said that while he had been resident at the Infirmary for Children in 1884 a case of abscess of the brain and liver had been recorded which was secondary to a pain in the vermiform appendix. He was much struck by the frequency of the disease now as compared with its great rarity 30 years ago. He thought these cases were not missed by the practitioner of those days. In Dr. West's book on "Diseases of Children," published in 1859, the author recorded four cases, and the description of the disease showed that he recognised its existence and its rarity. It was important that further work should be done to arrive at the cause of this increase in so fatal a disease.—Mr. R. W. MURRAY said he had read a paper 15 years ago in which he had advocated treating these cases by hot fomentations and temporising measures until the abscess pointed, and then opening and draining. He could not now value such a recommendation; the poison had increased in virulence, possibly due to food adulteration. He would emphasise the importance of abdominal pain in children.—Mr. F. T. PAUL said that in his early days he remembered only three cases of appendix disease in five years, during which every fatal case at the Liverpool Royal Infirmary was examined after death. He believed that there was always a foreign body in the appendix at the first attack, either a concretion or other body. It was essential to get the case early, but where the case was not seen at the very onset it was necessary to use judgment as to operation. In some cases he thought it wise to wait for an interval operation; no hard-and-fast rule could be laid down.—Dr. C. J. MACALISTER thought investigation was needed as to the cause of intestinal diseases, especially into food habits. He had been struck by the way in which some individuals seem to require an animal and others a vegetable dietary. Appendicitis was closely related to the other intestinal disorders, such as colitis, and he thought the condition of the teeth had much influence in these diseases.—Mr. ARTHUR J. EVANS drew attention to the fact that a right-sided basal pneumonia might be mistaken for appendicitis.—Mr. DAMER HARRISSON also spoke, and Mr. SIMPSON replied.

Dr. WARRINGTON read a paper on Meningitis Serosa, which he said was chiefly associated with otitis, but was also associated with other infective diseases, as tuberculosis. The term implied a condition in which there was a pathological collection of clear sterile fluid in the intracranial cavity. He related a number of cases associated with otitis media, and alluded to the earlier as well as to the later views on the pathology of the condition. The diagnosis from abscess of the brain was of much practical importance. The chief guiding marks appeared to be (1) the sudden and acute onset of symptoms with an otitis; (2) the fluctuating course of the symptoms; (3) the absence of constitutional signs often associated with brain abscess; and (4) a study of the localising signs which differ from those sometimes met with in abscess. He then described cases illustrating the occurrence of this condition in general infections and particularly in tuberculosis, where grave cerebral symptoms might appear and yet terminate favourably. He drew attention to the fact that serous exudates into the intracranial cavity might occur in association with distant sites of suppuration—e.g., after appendicitis and puerperal infection. Lastly, he mentioned instances following a blow on the head, or a mental shock, and described the clinical history of a case of "serous apoplexy" in a young man, occurring as the result of starvation and exhaustion and terminating in complete recovery.—The following took part in a discussion on the paper: Mr. A. ADAIR DIGHTON, Dr. T. R. GLYNN, Mr. H. E. JONES, Dr. J. OWEN, Professor E. E. GLYNN, Mr. DAMER HARRISSON, Dr. N. P. MARSH, and Dr. R. J. M. BUCHANAN.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

Some Recent Conceptions of Hysteria.—The Toxæmias of Pregnancy.

A MEETING of this society was held on April 3rd, Dr. STANLEY RISELEY, the President, being in the chair.

Dr. A. G. YATES, in a paper on Some Recent Conceptions of Hysteria, discussed, firstly, the etiology of functional nervous disorders. This was obscure, because as yet no pathological changes had been found to account for them. This failure had in recent years led to an elaborate attempt to define the neuroses and explain their causes in terms of psychology. Symptoms were explained, not on the basis of physical changes in the tissues, but on that of abnormal mental functions. In referring especially to the work of Janet and Freud Dr. Yates said: Both assume the existence of subconscious mental processes. Janet argues that in the hysterical mind that portion of it which is concerned with conscious mental activity is quantitively diminished. It is not able to contain at one and the same time as many thoughts, feelings, or emotions as the normal mind. The expression "field of consciousness" is a convenient one to include the whole mass of ideas, sense impressions, &c., of which a person is at any one moment conscious. It might be represented diagramatically by two circles, one within the other. The inner circle would represent the particular idea, object, or feeling towards which the mind was at that moment directing its attention. In the outer circle, we might place all the other mental processes of which the mind was at the same moment conscious, but less distinctly. This is the peripheral portion of the field. We might extend our diagram still further by adding a third circle outside, to represent the subconscious portion of the mind. By such diagrams we could compare the

normal with the hysterical mind, simply by making the circles representing the conscious field larger in the former than in the latter. In other words, a number of mental processes which in the normal mind are retained within the conscious portion are, in the hysterical individual, transferred to the subconscious area. Present sense impressions are often unable to gain admission into the diminished conscious area, with the result that anæsthesia is produced. In the hysterical fit the area of personal consciousness is not merely diminished, but for the time being obliterated, and the mind is dominated by some idea, impression, or event of the past. This mechanism is sometimes quite apparent, but not always. It seems probable, nevertheless, that this apparently meaningless paroxysm is the result of some idea or memory of the past, fixed within the subconscious sphere in a mind in which that sphere is abnormally active and large, but possessed of a diminished facility or outlet into the neighbouring sphere of consciousness. Such a fixed idea from time to time bursts its barriers, flows out with irresistible force, flooding the already diminished field of consciousness, takes complete command of the individual, and spends itself in a display of long pent-up emotion. All the other phenomena of hysteria which occur during the interparoxysmal period are likewise explained on the assumption of some fixed subconscious idea finding an outlet by these varied manifestations. Freud looks upon the condition as the result of some mental shock. The corresponding painful emotions, instead of gaining a suitable outlet, are repressed or driven down into the subconscious area of the mind, so that they are no longer felt. They are still active, however, and some outlet must be provided. This is effected by the conversion of these submerged emotions into the physical and mental phenomena which we know as the symptoms of the disease. By a method of treatment known as "psycho-analysis" Freud has been able to trace the connexion between some original painful emotion and such hysterical phenomena. It is a long and tedious process, but Freud believes that by analysing the enormous mass of ideas and chains of thought which he obtains he can discover the hidden cause of the symptoms, and claims that its revelation to the patient will effect a cure. These two theories resemble one another in assuming that the causative factor is some mental impression buried in the subconscious mind. Two cases were shown illustrating the rhythmical tremor of hysteria. In one case the left forearm had been partially paralysed from birth. It had, however, given no trouble until six months ago, when it became painful. Subsequently the tremor developed in it, and within the last few days it had also affected the other arm.

Mr. W. W. KING, in a paper on the Toxæmias of Pregnancy, said that these toxæmias often manifested themselves as disturbances of metabolism which could be recognised by urinary examination. The nature of the toxin was unknown, but it was probably composed of a number of different elements, as suggested by Leith Murray. Recent work also indicated that the internal secretions from the ductless glands were an important factor in toxæmic pregnancy. The early vomiting of pregnancy was not "physiological," and all but the mildest cases required treatment. The symptoms of pre-eclamptic toxæmia should be explained to all primiparæ. Glucose in the urine in pregnancy might be due (1) to diabetes; (2) to hypersecretion from the pituitary gland; (3) to inability of the liver to store up glycogen. The last type was of toxic origin and was often associated with headache, neuritis, or muscular twitchings. The glucose disappeared when the patient was placed upon a meat-free diet. A case of toxic post-partum jaundice with very severe vomiting, which followed slight toxæmic symptoms, was related as showing that even mild symptoms might develop into grave disease. Both infant mortality and morbidity were much increased in all forms of toxæmic pregnancy.

ÆSCULAPIAN SOCIETY.—A meeting of this society was held on April 4th, Mr. Henry Curtis, the President, being in the chair.—Dr. A. E. Stansfeld read a paper on Vaccine Therapy in General Practice. Proceeding from the assumption that vaccine therapy has already amply justified its existence, Dr. Stansfeld pointed out the ways in which the "boom" in vaccines has served to discredit their use in the production of immunity. They have been used in unsuitable cases; improper doses have been employed or the intervals of administration have been at fault; slovenly bacteriological methods have sometimes been responsible for failure, and in other cases older methods, to which vaccination should be merely an adjuvant, have been unfairly abandoned. After dealing briefly with the varieties of immunity and the nature of vaccines and immune sera, Dr. Stansfeld proceeded to consider (1) the general rules which determine the suitability of a case; (2) the methods of immediate procedure, culture, &c.; (3) the administration of the vaccine. Vaccine may be used for prophylaxis or for treatment, and in the former category such recurring diseases as nasal catarrh and boils will be of special importance in general practice. As regards suitability of cases for treatment, it must be remembered that although practically all kinds of infections are amenable, not all cases are suitable. Speaking generally, it might be said that the more localised and the more chronic the infection the more the benefit likely to be obtained from vaccine therapy. But there are exceptions to this statement, such as the B. coli infections of the urinary tract. Various common types of lesions were then considered with the amenability of each, illustrated by recital of cases. The importance of identifying the causal organism, the possibility of multiple infective foci, and the frequency of mixed infections were discussed. It was pointed out that special tests—e.g., the agglutination test—may be necessary to demonstrate the relationship of the bacterium isolated to the disease, and speculative use of vaccines was condemned. The methods of collecting material for cultures were dealt with and then the relative influence of vaccines prepared from the common and specific organisms. After considering the value of stock vaccines, Dr. Stansfeld described the use and special advantages of sensitised vaccines—viz., the complete absence of unfavourable reaction and of negative phase, and the superiority of the sensitised vaccine to the uncombined vaccine and corresponding serum used independently. The importance of adopting other methods of treatment, particularly local drainage and disinfection, was insisted upon. The initial dose of vaccine depends upon the acuteness or chronicity of the infection, the degree of localisation, the nature of the infecting organism, and the general condition of the patient. No exact rules are possible, because patients and organisms vary; the chief guide must be experience, and when in doubt it is well to err on the side of giving too small a dose rather than too large. Frequency of administration and the intervals to be allowed between successive doses again depend upon experience and upon the result of the first dose. In the case of sensitised vaccines, the absence of negative phase permits the use of large doses at frequent intervals, and ascending doses on three consecutive days are usually employed.—Dr. Leslie Durno emphasised the importance of local attention to the teeth in cases of pyorrhœa alveolaris; in his experience this, including removal of carious teeth, sufficed to cure most cases in a very short time. He thought extraction should be cautiously employed if alveolar abscess existed.—Dr. David Ross instanced a case in which extraction had been followed by a very severe reaction under these circumstances, and the President emphasised the inadvisability of extracting a tooth when an alveolar abscess is pointing through the jaw.—Dr. T. S. Maynard considered the treatment of chronic cases of B. coli cystitis.—Dr. J. R. T. Conner referred to treatment by production of "fixation abscess."

LONDON DERMATOLOGICAL SOCIETY.—A meeting of this society was held at 59, Leicester-square, on March 18th, Dr. Morgan Dockrell being in the chair.—Mr. E. H. Ross read a paper on the Intracellular Parasites in Syphilis and in Allied Conditions in Animals, in which he said that he had found intracellular protozoal blood parasites in a large percentage of guinea-pigs examined; another species of the same genus of protozoal parasite had been found in earthworms. He had also described similar intracellular parasites in every untreated case of syphilis in the human subject he had examined, and some of these had been observed to develop into spirochætæ. They had been found in the chancres, buboes, condylomata, secondary sores, skin rashes, and in the peripheral blood during the acute stages of the disease. Mr. Ross also mentioned that rabbits and hares suffer from a disease indistinguishable from syphilis.—The President spoke of the results of his

observations on patients after giving salvarsan—viz., that they obtained a complete freedom from the parasites for a time, but they returned before long and that it was necessary to continue with mercury.—Dr. W. Griffith considered that from a practical point of treatment it might be well to examine the blood of patients for these amœboid bodies, and only give salvarsan when they and the spirochætæ were found free in the blood.—Dr. W. Knowsley Sibley said the paper confirmed the views he had always maintained. The fact that the same organism was found in earthworms suggested to his mind that the origin of the syphilitic virus was mother earth.—The following cases were shown: The President showed a woman, 35 years of age, who had had a peculiar lesion on the bridge of her nose for some two years which he was inclined to consider was a rhinoscleroma.—Dr. Sibley exhibited a case of Lupus in the Inner Canthus of the Right Eye in a man of 28 years, who had had it for four years. He had treated it with one application of carbon dioxide snow for two minutes and had obtained a very good result.—Dr. J. L. Bunch showed a case of a girl, 17 years of age, with an obvious Dermatitis Artefacta lesion on the leg.—Dr. Griffith exhibited a case of Mycosis Fungoides in an old man, and the case of Crocodile Skin he had shown on a previous occasion, and one of Circumscribed Prurigo.

MANCHESTER MEDICAL SOCIETY.—A meeting of this society was held on April 2nd.—Dr. H. B. Fantham, of the Liverpool School of Tropical Medicine, read a paper on Some Recent Researches on Sleeping Sickness, Spirochætosis, and Amœbic Dysentery. He dealt first with human trypanosomiasis, especially with the recent work on the Rhodesian parasite (Trypanosoma rhodesiense, Stephens and Fantham), and the characteristics of the disease as seen in cases from Rhodesia and Nyasaland. The discoveries of Kinghorn and Yorke in determining the vector (Glossina morsitans) and the reservoir in big game were discussed, together with the significance of the developmental period of the trypanosome in the fly. The habits and breeding places of Glossina morsitans in contrast with the more restricted ones of Glossina palpalis were noted, and the recent methods of drug treatment were mentioned. The occurrence of a human trypanosomiasis in Brazil was referred to. This section of the address was fully illustrated by lantern slides, specimens showing the life cycles of glossinæ and microscopic preparations. Regarding spirochætosis, the life cycle of S. duttoni and its stages in the tick Ornithodorus moubata were briefly dealt with and illustrated by specimens and slides. Mention was made of the recent work on spirochæta recurrentis in lice (pediculus vestimenti) by the French investigators in Tunis. In connexion with amœbic dysentery the importance of the study of Entamœba tetragena was emphasised, and this organism was briefly compared and contrasted with E. coli and E. histolytica. Lantern slides illustrating these amœbæ were shown together with a smear containing E. tetragena.

THE MILK SUPPLY.—A special meeting of the council of the Charity Organisation Society will be held at Denison House, Vauxhall Bridge-road, on Monday, April 14th, at 4.30 P.M., when Mr. H. Dixon Scott, honorary treasurer of the Pure Food and Health Society of Great Britain, and Mr. Wilfred Buckley will speak on "The Best Means of Increasing the Supply of Pure Milk"; and Dr. Reginald Dudfield, medical officer of health to the metropolitan borough of Paddington, will speak on "The Supply of Suitable Milk for Infants."

DONATIONS AND BEQUESTS.—By will the late H. G. Anderson has bequeathed £1000 to the Arbroath Infirmary and £500 to the Convalescent Home connected with it. The testator also left £500 to the British Hospital at Montevideo.—The late Mrs. Elizabeth Akrill, of West Bromwich, has left £10,000 for the erection and endowment of a convalescent home for women and children, or a home for crippled children, or for both purposes.—Subject to some life interests the late Mr. H. Goddard, of Brixton Hill, has left about £18,000 to the Brixton, Streatham Hill, Tulse Hill, and Herne Hill Dispensary.

Reviews and Notices of Books.

The Principles and Practice of Medicine, designed for the Use of Practitioners and Students of Medicine. By Sir WILLIAM OSLER, Bart., M.D. Oxon., F.R.C.P. Lond., F.R.S., Regius Professor of Medicine, Oxford University, &c. Eighth edition, largely rewritten and thoroughly revised, with the assistance of THOMAS MCCRAE, M.D., F.R.C.P. Lond., Professor of Medicine, Jefferson Medical College, Philadelphia, &c. London and New York: D. Appleton and Co. 1912. Pp. 1225. Price 21*s.* net.

AMONG the many causes of the sustained and deserved popularity of Professor Sir William Osler's well-known text-book of "The Principles and Practice of Medicine," the most important are the regularity and efficiency with which it is revised and brought up to date, so as to afford a carefully weighed and digested account of much new work of recognised importance. We are told in the preface that it is 20 years since the appearance of the first edition, and that comparing the first with the present very little remains of the original work. It still retains, however, the clear arrangement, the broad outlook, and the lucid, incisive style of its distinguished author, which have made it one of the most widely read text-books for nearly a generation. Dr. Thomas McCrae has revised the sections on treatment and on diseases of the organs of locomotion in the present edition, and has also seen the work through the press. Dr. A. G. Gibson, of Oxford, has helped in the rewriting of the section on the heart and arteries, while Dr. H. M. Thomas and Dr. Harvey Cushing have assisted in the revision of the section on nervous diseases.

The chief changes made in this edition are that the infectious diseases are grouped in a different order, and those of which the specific germs are doubtful or undiscovered are considered separately at the end of the section. The chapter on enteric fever has been brought up to date, and is one of the most informing and practical accounts of this disease with which we are acquainted. A new chapter has been added dealing with the colon bacillus infections, which are considered after enteric fever. These are divided into general hæmic infections, subinfections, and local infections. Unfortunately, little or no attention is given to the treatment of these conditions. In connexion with typhus fever, mention is made of the work of Nicolle, Anderson, and Goldberger who have been able to transmit the disease to monkeys. The pneumonias and pneumococcic infections are grouped together, and are considered in a very clear and authoritative manner. The description given of tuberculosis is brought up to date, and much new matter is incorporated, especially in regard to pathology. The discussion of the treatment is critical and practical, and in regard to the use of tuberculin Sir William Osler is very wisely cautious and scientific. We would specially draw attention to his warning that its indiscriminate use renders an estimation of its value very difficult. In regard to syphilis, an interesting summary of the administration of salvarsan and its uses is given, with a brief description of the types of case for which it is suitable. Among the new sections introduced into this edition we may mention those dealing with leishmaniasis, the sporotrichoses, pellagra, ochronosis, and hæmochromatoses. An interesting account is also given of caisson disease and of its pathology and treatment.

The eighth edition of Sir William Osler's text-book will fully maintain the reputation of its predecessors. We can cordially recommend it as a comprehensive, critical, and practical work, both for the student and the practitioner.

The Surgical Diseases of Children. By W. F. CAMPBELL A.B., M.D., Professor of Anatomy, Long Island College Hospital, Surgeon-in-Chief, Trinity Hospital, &c.; and LE GRAND KERR, M.D., Attending Pædiatrist to the Methodist Episcopal and other Hospitals. London and New York: D. Appleton and Co. 1912. Pp. 693. Illustrated. Price 25*s.* net.

THE surgery of childhood presents its peculiar problems and difficulties, not merely because of the smaller anatomical relationships, but because the surgeon is called upon to consider the effect upon development and growth that follows all surgical procedures in a child. "The authors, therefore, feel that a distinct advance in this field is possible only as the surgical diseases of childhood are viewed from both the standpoints of the surgeon and the pædiatrist. Again, the surgery of childhood imposes a heavy responsibility upon the family physician—it is always his problem first, before it is shifted to the shoulders of the specialist." It is apparently owing to these considerations that we have the present work, in which two authors have collaborated and which is dedicated to "the family physician."

The authors have treated the surgical diseases of children in a systematic way. Beginning with general considerations and going on to the examination of the child in regard to posture, gait, and pain, they come to deal with the various surgical affections and injuries in order and in detail. This concludes Part I. in 9 sections and 43 chapters. Part II. is occupied with regional surgery, bringing the total chapters up to 80. There is a useful index. All that the authors write is sound and up to date, and therefore differs little from what is to be found in the text-books of European currency. It would be tedious to refer to the many well-known expedients for the better treatment of children that have found their way into use in recent years, for surgeons all over the world are doubtless quite familiar with most of them. We have rather looked for the banishment of old and worn-out methods, and are surprised to find that the use of the plaster-of-Paris jacket for the ambulatory treatment of spinal caries finds a place in this book. In fairness to the authors we must state that they write of it in a tone of no special approval. We should have preferred the omission of the method. Scattered throughout the work are many remarks of a peculiarly practical character indicating a close personal acquaintance with the conditions described, and there are one or two sections which will be found very useful by the general practitioner; notably that on the surgical signification of pain, which is a chapter full of information. On the other hand, the sections on the production of anæsthesia and on the use of X rays in surgery are scrappy and of little real use. These subjects are much too important to be dealt with in a chapter of a book like the present.

In regard to the illustrations they are on the whole clear and good, and when they are photographs of real conditions they are unexceptionable, but we have no great love for diagrammatic photography, and to look upon the photograph of a child with an eager, penny-expectant face, supposed to be suffering acute visceral pain under a shaded skin area, is to gaze at an incongruity. In many places the construction of sentences is loose and ambiguous, and we have noticed a few grammatical errors. Where there is loose construction only it is not difficult to gather the authors' meaning, but in some instances they lead themselves to say what obviously they do not mean; as, for example, on p. 157, when discussing the status lymphaticus: "When the child becomes the victim of an apparently very trivial inflammation or injury there is a very great and disproportionate *resistance* to injuries and inflammations in particular, and to all disease in general." These may be thought to be small and unimportant blemishes in an otherwise good book. Nevertheless, they are to be noted out of consideration for the many other good books at our disposal on the same subject.

We recommend this book to the American family physician, not, indeed, as enabling him to undertake himself all that it describes, for it is hardly full enough for that, but rather as showing him how much can be done for the cure of disease, or the correction and prevention of deformity, in a child by surgical methods.

Malingering and Feigned Sickness. By Sir JOHN COLLIE, M.D. Aberd., J.P., Medical Examiner, London County Council. Assisted by ARTHUR H. SPICER, B.S. Lond., D.P.H. Illustrated. London: Edward Arnold. 1913. Pp. 352. Price 10*s.* 6*d.* net.

Sir John Collie's small volume, published last year by Messrs. Baillière, Tindall, and Cox, on "Medico-Legal Examinations and the Workmen's Compensation Act, 1906," together with various lectures and published papers by the same author, has already afforded valuable hints to members of the medical profession as to methods by which the simulation and exaggeration of disease and of the alleged effects of accidental injury may be detected and proved. The subject, however, is of growing importance, and a more serious and exhaustive treatise on the subject, such as that which Sir John Collie has now compiled, should be welcomed by a large class of medical men with less experience than his in a branch of medical practice which he has made particularly his own. He does not write, however, exclusively for medical readers, and apologises quite unnecessarily for explanations and an absence of medical terminology which should increase the usefulness of his work. He has, in fact, embodied a large number of reports written for public bodies and insurance companies, and has had in his mind the possible usefulness of his book to members of the legal profession and to those responsible for the administration of the National Insurance Act.

Such a volume should be capable of comprehension by a wide public, and we hope that it may find a place in judicial libraries. It should also be instructive to employers of labour who are interested no less than insurance companies are in checking the dishonest practices which Sir John Collie describes. After all, it is the employer of labour who, so far as workmen's compensation is concerned, is most directly interested in the prevention of malingering. Insurance companies can recoup themselves by demanding higher premiums, safe in the knowledge that insurers must have recourse to those whose financial status promises security rather than to those who underbid in the desire to attract business; and if a general lesson for laymen may be extracted from Sir John Collie's writings it is to the effect that the most insidious malingerer may one day be caught off his guard by an observer who need not necessarily be equipped with scientific knowledge. We have spoken of the book as calculated to be useful to lawyers, and we may mention that the author combines with a power of stating lucidly facts and law a grasp of legal principles and a habit of eliminating the irrelevant not always to be found in the writings of those who, without having had the advantage of a legal training, deal with legal questions affecting professional duties.

The perusal of the wiles that may be employed to lure the suspected malingerer on to the performance of some act which in his supposed condition should certainly be impossible leads us to speculate how far unscrupulous solicitors, or for that matter unscrupulous medical practitioners—both of which classes we are presuming to exist—will be likely to use the book to "coach" client or patient as to what must be avoided. We

can imagine such a legal adviser earnestly impressing upon his client the necessity for ceaseless watchfulness in playing his part, and entreating him if the ingenuous examiner drops a pencil not to forget his stiff back and stoop to pick it up, or reminding him that when he has once stated that he cannot raise his hand above his shoulder he ought not to betray himself by pulling off his own jersey in the usual way when asked casually to undress. We fancy, however, that even thus coached the malingerer would be found ultimately giving away his case in his increased apprehension of the pitfalls about him.

The arrangement adopted in the work is simple and practical. General chapters on malingering, on its prevention, and on medico-legal examinations as considered apart from any particular allegation of disability, are followed by others devoted to special topics of frequent recurrence, and requiring special consideration in sifting truth from falsehood. The establishment of the truth, on whichever side it may lie, is, it must always be remembered, the primary object of the examiner, and Sir John Collie holds no brief against the working man; on the contrary, he avows his recollection of and admiration for deeds of fine independence and sufferings nobly borne, but does not revert to them after his preface because they are not relevant to the subject matter. A consideration of special forms of malingering, which include the tests recommended in cases of alleged ear and eye trouble, and for the examination of the back, as well as the uses to be made of X ray photography, is followed by chapters discussing the effects of the Workmen's Compensation Act and the National Insurance Act; and some practical observations upon the preparation of medical evidence and the position of the medical man with regard to allegations of libel and slander are added. There is a chapter which touches the fringe of a subject of great importance in connexion with all forms of compensation for injury. "Accidents where pre-existing disease is present" have received practically no attention at the hands of the legislature in the imposition of heavy liabilities upon employers, by means of Acts of Parliament couched in terms of the most general description, and employers undoubtedly have suffered unjustly thereby. The questions of liability which arise in this class of case, and the question of the limitation to liability which justice should impose, are interesting French writers at the present moment, and may some day receive with us the recognition which their importance deserves. Reference should be made to the useful and practical chapter at the end upon electrical testing, for which the author acknowledges indebtedness to Dr. Christine Murrell. The book is copiously illustrated throughout.

The Surgery of the Rectum for Practitioners. By Sir FREDERICK WALLIS, M.B., B.C. Cantab., F.R.C.S. Eng., Surgeon to Charing Cross Hospital, St. Mark's Hospital, and the Grosvenor Hospital for Women and Children. London: Henry Frowde and Hodder and Stoughton. 1912. Pp. 355. Price 15*s.* net.

UNFORTUNATELY the author did not live to see the issue of this, the second, edition of his book; he corrected the last proofs only a few days before he died. His book had already achieved a position in the literature of surgery, and this new edition would have enhanced his reputation. It is eminently a practical book, though theory is by no means neglected. It contains just those things which the general practitioner wishes to know about the diseases of the rectum, and the striking illustrations render the descriptions easily comprehensible. A good account is given of the anatomy of the rectum and also of its development—matters of importance in connexion with the surgery. As is well known, the author held that pruritus ani is commonly associated with ulceration of the rectum, and the correctness of this opinion is shown by the fact that treatment based on it will in many cases lead to a cure of the itching. He did not claim that an ulcer was always the cause, but he urged that it should always be sought for.

We know no work on the surgery of the rectum better suited for those who have not devoted special attention to this branch of surgery.

The Nutrition of the Infant. By RALPH VINCENT, M.D. Durh. Fourth edition. London: Baillière, Tindall, and Cox. 1912. Pp. 343. Price 10*s.* 6*d.* net.

IN the present edition of Dr. Ralph Vincent's book on the nutrition of the infant, although a number of new arguments have been adduced for the exclusive use of unboiled milk as a food for artificially fed infants, the general spirit and arrangement of the book are on the now familiar lines. The particular modification of milk to which Dr. Vincent gives the name of "fat-whey," and which is adapted for home use, is fully described in Chapter IV., where the printed directions, supplied to patients attending at the Infants' Hospital, for preparing this highly complicated mixture are given in detail. These directions are more suitable for middle-class mothers who should not rely on charitable institutions for medical treatment. The use of a dried whey powder, which is cheaper to employ than home-made whey, would obviate this difficulty.

An important argument for the use of raw milk is given in the chapter on the bacteriology of milk, and the sequels that await the operations of the physician who has not mastered the particulars are given here in all their lurid details. According to Dr. Vincent the chief bacteriological rôle in the processes of digestion in the infant is played by the streptococcus lacticus. This micrococcus is active only in the small intestine, and it is an obligatory fermentative bacterium—that is to say, it is not a facultative proteolytic bacillus like the bacillus acid lactici. Heretofore its presence and the importance of its functions have escaped notice, owing to the fact that it does not grow on ordinary nutritive media. This is, according to the author, the life-saving bacterium which we destroy when we boil milk, and this is the reason why infants fed on boiled or heated milk develop rachitis and all the other gastro-intestinal conditions which swell our infant mortality tables. One difficulty in accepting these views is that in Paris, New York, and other large cities where sterilised milk has been supplied on a large scale the infant mortality rate has been notably reduced. "It would appear," says Dr. Vincent (p. 168), "to be established that a fresh supply of the streptococcus lacticus in a faintly acid medium, such as milk, is an essential requirement of the infant." If this is so, how can the infant fed on recently boiled milk survive?

Although we find somewhat extreme the importance that Dr. Vincent attaches to the rôle of the streptococcus, in contradistinction to that of the bacillus lactis aerogenes and the bacillus acidi lactici, it is quite right that the attention of the medical profession should be drawn to the activities of a micrococcus which undoubtedly has an important place in the bacterial flora of the intestine, and to which heretofore too little attention has been given. But needful as it is to understand the essentials of percentage modification of milk—indeed, without such knowledge it is doubtful whether anyone can conduct the scientific feeding of infants—it must be remembered that in America, which is the home of the method, the practice of laboratory feeding and its nearest counterpart in home modification is rapidly dying out. And, further, it is worth while reminding ourselves that America, a country which spent such vast sums of money in securing a pure supply of milk which could be

safely given to infants without boiling, is now boiling the pure milk which it has been at such infinite pains to procure. We cannot help thinking that Dr. Vincent is championing a somewhat unpromising cause.

Radioactive Substances and their Radiations. By E. RUTHERFORD, D.Sc., Ph.D., LL.D., F.R.S., Professor of Physics, University of Manchester. Cambridge University Press. 1913. Pp. 699. Price 15*s.* net.

THIS is the production of one who is master of his subject. Familiar as one may be with the researches of Professor Rutherford in the field of radioactivity, it is not until this book is perused that it is possible to realise the enormous amount that he has done in this new and important branch of science. This work, for example, greatly supplements his previous publication "Radioactivity," the last edition of which appeared in 1905. Since that time many new discoveries have been made, including a number of radioactive substances. In 1905 20 of these were known; there are now 32, and others are likely to appear in the future. While the book is rather outside the scope of the medical practitioner who has not been specially trained in physics, it will appeal strongly to the student of pure science, and there are some chapters that will afford interesting reading for anyone who is concerned for the future of medical science, even though he have not enough of the mathematical faculty or technical knowledge to follow the whole text. The first six or eight chapters are particularly recommended from the latter point of view, also Chapters XIII. and XIV., dealing in particular with radium, and Chapter XIX., on the radioactivity of the earth and atmosphere.

Though the book is intended more for the physicist than the physician, the latter may well be urged to read it. He will learn much from its perusal and have the satisfaction of feeling that his interesting knowledge is obtained from the latest authoritative work on a fascinating subject.

Handbuch der Vergleichenden Physiologie. Herausgegeben von HANS WINTERSTEIN. Lieferung 29. Band I. *Physiologie der Atmung.* Zweite Hälfte. Bogen 21–30. Pp. 321–480. Lieferung 30. Band III. *Physiologie des Energiewechsels.* Erste Hälfte. Pp. 485–644. Lieferung 31. Zweite Hälfte. Pp. 625–786. Each part 5 marks. Jena: Gustav Fischer. 1912.

THE whole of Part 29 is from the pen of Professor Babák, of Prague, who deals first with the mechanisms and innervation of the aquatic arthropoda. Then follows a particularly interesting account of the tracheatæ and the marvellous adaptations of the mechanisms concerned in the process of respiration in insecta generally. Even when the concluding page is reached the author is still in the midst of his exposition of the respiratory arrangements and the nervous mechanism controlling the respiratory processes in beetles. Naturally the work of Plateau is largely drawn on, but the author adds a large amount of his own original work to the already colossal amount of details in regard to insect respiratory processes generally. We commend most heartily Professor Babák's contribution to the attention of zoologists and comparative physiologists as an exceptionally interesting and detailed exposition of the beauties of mechanical adaptation in articulate animals in regard to the all-important process of respiration.

In Part 30 Professor Biedermann continues his elaborate exposition of the supporting and skeletal tissues. A very full exposition is given of the supporting and mechanically protective structures in the protozoa, such as foraminiferæ and radiolarians, with a wealth of detail that can appeal only to professed zoologists. Then follows an equally thorough and minute account of all that relates to the skeletal tissues of sponges and echinoderms. The wealth of chemical, physiological, and morphological details is almost overwhelming. Towards the end of this part the author proceeds to give an account of the hard parts of the corals. Thoroughness is the measure of the author's endeavours, and he has succeeded both in regard to the matter of the text and the illustrations.

Part 31 contains the continuation of Professor Godlewski's contribution on the Physiology of Reproduction on such subjects as secondary sexual characters of the female and their relation to the genital glands, the inner secretion of the ovaries, hermaphroditism, normal and abnormal. Then follows a very full account of the changes that accompany maturation of the ovum and a rather elaborate description of parthenogenesis. Insemination and its equivalent in the lower invertebrates are next considered. The extraordinary arrangements in some of the lower invertebrates connected with the act of copulation are described and figured, the account of this process in worms and in certain mollusca, such as helix pomatia, being particularly full. Arthropoda are next dealt with. In this chapter, as in the others, the illustrations are a marked and useful feature. This brings the author to the vertebrates. A short account (about 16 pages) is given of similar events in fish, amphibians, reptiles and birds, and mammals. This part ends with a short account of ovulation and artificial impregnation—a process first practised by Spallanzani on frogs.

Forensic Medicine and Toxicology. By C. O. HAWTHORNE, M.D. Glasg., Lecturer on Forensic Medicine in the London School of Medicine for Women. Third edition. London: Edward Arnold. 1912. Pp. 344. Price 6*s.*

IN reviewing a third edition of a work but little need be said in regard to its general scope and nature. Dr. Hawthorne has presented in a convenient and classified form the principles and practice of forensic medicine as these concern medical students and practitioners. The various facts are set out clearly and succinctly, and students preparing for the ordinary pass examinations will find all the information they require put in a suitable form.

As a short work of reference practitioners can with advantage consult its pages regarding the main points in medico-legal cases where they may be called upon to testify. Attention may be especially directed to the chapters dealing with medical evidence and reports, documentary evidence, professional confidences, and similar subjects which are constantly presenting themselves as matters of difficulty in actual practice where a medical man's evidence is required. The portion of the volume devoted to toxicology will also be found of interest. Dr. Hawthorne has refrained from quoting illustrative cases; this procedure renders it possible to decrease the size of the work, an advantage that, in our opinion, compensates for any loss of interest. The present edition has been carefully revised and to a large extent rewritten.

Grundriss der Psychiatrischen Diagnostik, nebst einem Anhang, enthaltend die für den Psychiater wichtigsten Gesetzesbestimmungen und eine Uebersicht der gebräuchlichsten Schlafmittel. Von Professor Dr. RAECKE, in Frankfurt a.M. Mit 14 textfiguren. Dritte vermehrte und verbesserte Auflage. Berlin: August Hirschwald. 1912. Pp. 188. Price 3 marks.

THIS is an excellent little compendium of psychiatrical diagnosis. Both from the neurological and the purely psychiatrical standpoints the information it presents in small compass is accurate and comprehensive. The book is thin and will easily slip into the pocket; it is well printed and well arranged, while a good index renders easy the finding of any special subject. In the first section the conduction of an investigation into the patient's physical

and mental states is described, and no detail appears to have been omitted. The student will here find practical methods of examining the state of the patient's intelligence; Jung's association tests are explained and exemplified, also Heilbronner's picture methods. Binet's scheme for the examination of children of each year from 3 to 12 is given in its entirety. There is a useful section on the simulation of nervous and mental symptoms. The second part of the compendium is taken up with brief descriptions of various types of mental disease, largely following Kraepelin's classification; the main symptoms are arranged so as to facilitate diagnosis. An appendix contains an abstract of German law as it affects the psychiatrist, and a useful summary of the chief drugs in vogue for the treatment of sleeplessness in the insane.

LIBRARY TABLE.

Heredity and Memory. By JAMES WARD, Sc.D., Professor of Mental Philosophy in the University of Cambridge. Cambridge: At the University Press. 1913. Pp. 56. Price 1*s.* 6*d.*—The author is of opinion that in the consideration of the problem of heredity psychology may show us that its secret may be found in the facts of memory, provided we look at the world from a spiritualistic and not from the usual naturalistic standpoint. A large part of the work is occupied with a lucid and powerful criticism of Weismann's hypothesis, and an alternative "mnemic theory" is set forth, according to which the germ cell is a definite unity, the counterpart of the structural alterations wrought by habit in the parental organisms with which it has been in sympathetic rapport all along. It is potentially the latent entelechy of a future organism. There is no ground for separating organic from psychical life; all life is experience. It cannot be assumed that experience has no part in the building up of the organism and begins only when a viable organism is already there. For the author ontogeny and heredity are aspects of a single process—a process that only experience will explain. The mnemic theory requires not merely physical records or "engrams," but living experience or tradition, and it will work for those who can accept a monadistic or pampsychist interpretation of the beings that make up the world.

International Clinics. Edited by HENRY W. CATTELL, A.M., M.D., Philadelphia, in collaboration with many others. 4 vols. London and Philadelphia: J. B. Lippincott Company. 1912. Price 35*s.* net the four.—The fact that articles appear in one or other of the four volumes of this useful quarterly publication by authors whose names carry real scientific and professional weight in this country and in the United States sufficiently indicates the quality of the work. It is impossible to review such a publication as this. To do so adequately would demand a critical examination of most of the 107 separate articles contained in the four volumes. It is sufficient to say that they embrace practically all the subjects that go to make up the field of medical science, and include articles also on certain subjects in medical economics, history, and biography. They are well illustrated with cuts and half-tones.

Astonishing Anatomy! By TINGLE. Vol. I., Part I., Fasciculus I., Section A (being Vol. II., Pt. VII., Fasc. III., Sect. F, of the Revised 1912 Edition, also Vol. V., Pt. IV., Fasc. X., Sect. S, of the 1911 Edition (New Series), and Vol. XI., Pt. II., Fasc. VIII., Sect. O, of the Abridged 1910 Edition). Fully illustrated by numerous woodcuts, abrasions, finger-prints, and thumb-nail scratches. London: Sir Isaac Pitman and Sons. 1913. Pp. 86. Price 1*s.* net.—The title should warn the reader to a certain extent what to expect—namely, a skit, and not an appreciation of the wonders of morphology. A note facing the title page advising the reader that by moistening the cover of the book and sprinkling it with mustard an efficient plaster will be obtained should confirm the impression. Such testimonials as "Quainter than *Quain*," and "I know no better anatomy—*Eugen Cocoa*"; and such *errata* as "For 'previous rotten' accounts" read "previous *written* accounts," and for "equally eminent authority" and "valued contributor" insert "*author* in each case," should make the impression a certainty. The contents of the book are extremely funny, and we can make no attempt to select anything as more particularly deserving quotation than anything else. The same difficulty we remember to have occurred when attempting to review "Wisdom while you Wait," a masterpiece which has obviously formed the model for the author of "Astonishing Anatomy."

Clinical Studies for Nurses. By CHARLOTTE A. AIKENS, formerly superintendent of Columbia Hospital, Pittsburg. Second edition. Illustrated. London and Philadelphia: W. B. Saunders Company. 1912. Pp. 569. Price 10*s.* net.—The purpose of this volume does not differ greatly from that of "Primary Studies for Nurses" by the same writer, the first volume of the series of which this is the second. It is designed to assist in securing graded instruction for nurses; to simplify and systematise the problem of teaching; to promote uniformity; to save time for teachers and pupils, and also to serve in some measure as a handbook for the nurse who is already trained and at work away from the training school or hospital. The writer has gathered into a volume matter previously published separately and dealing with subjects often very unsystematically taught by lecturers. The work aims to include the main points about the commoner diseases and their management, which a nurse must know if she is intelligently to assist the physician. The author thinks that no general training in nursing should be considered complete which does not include both theoretical and practical courses in obstetrics, as every nurse should know how to deal intelligently with obstetric emergencies. The desirability of providing during the last six months of the course for at least half a dozen class periods relating directly to private nursing is insisted on, as is also the importance of lessons in the ethical and business principles which should guide a nurse in applying for a hospital position. The need of a reference library for nurses in every nursing institute or training school is emphasised, and the writer furnishes a list of useful books of reference. This work will be useful to those interested in the training of nurses.

MISCELLANEOUS VOLUMES.

THE practical pursuit of archæology demands a considerable amount of leisure and a purse whose fulness is in direct ratio to the ardour of the possessor, but as a hobby and as a means of recreation during leisure hours and periodical holidays there are few occupations which can give such profitable results for a small amount of expenditure in money. In whatever manner archæological study is approached the subject appeals to the votary either with world-wide or only local opportunities in a useful manner, for an appreciation of the past is, in our modern excessive hurry, of real psychotherapeutic value. Archæology, too, covers a very wide field, and its different branches will appeal to minds of many moulds. In *Rough Stone Monuments and their Builders*, by Dr. ERIC PEET (London: Messrs. Harper and Brothers. 1912. Pp. 172. Price 2*s.* 6*d.* net), one of these branches is briefly but adequately dealt with, and the little book, which is one of Harper's Library of Living Thought Series, is exactly the kind which the casual student requires, while the more

serious investigator will no doubt be glad to have in concise form a sketch of our present knowledge of megalithic monuments. A fairly full account of these monuments in Great Britain and Ireland is contained in the introduction and two following chapters, the succeeding chapters dealing with Scandinavia, France, Spain, Portugal, Italy, Africa, Malta, and the dolmens of Asia. Lastly, the writer discusses the builders of the monuments and their habits, customs, and religion, who they were and whence they came, inclining to the theory that megalithic builders were one race whose work was spread far and wide owing either to trade influence or migration. What that race was is a problem which may never be solved.

The pestilent character of the common house-fly as a patron and fomenter of all that is filthy, unsavoury, and insanitary, and as carrier of infection and disease, while well-known nowadays to medical men and scientists, and to some extent to cultured people generally, is still unknown to the great mass of the people. We reviewed in THE LANCET of August 17th, 1912, an excellent book by L. O. Howard on the subject, but such a book would not find its way among the populace generally, and, if it did, it would be above their heads. We welcome, therefore, a useful pamphlet by Mr. ERNEST E AUSTEN, of the British Museum, on *The Housefly as a Danger to Health* (London: British Museum (Natural History), Cromwell-road. 1913. Pp. 11. Price 1*d.*), which describes, with excellent illustrations, the breeding-places and life history of the insect, the relations of house-flies to disease, with some account of the remedies and preventive measures that can be used against them. The medical practitioner especially may find this penny pamphlet of service in emphasising the importance of keeping the troublesome creatures out of the sick room and the kitchen.——The evil influence of the mosquito in helping to bring about racial degeneration has of late been the subject of scientific consideration, while the practical hygienic results of the extermination of this pest have been demonstrated in many places, and nowhere more conspicuously than on the Isthmus of Panama. But in mosquito-ridden localities that have not the advantage of being under military domination the public must work out its own salvation, and for this popular instruction in the relation of the pestiferous insect to disease, and the methods by which it may be destroyed, is essential. We have noted already several books designed and suited for that purpose, to which must now be added Dr. ALVAH H. DOTY'S *The Mosquito* (London and New York: D. Appleton and Co. 1912. Pp. 79). It is so written as to give all necessary information in popular language.

Dr. J. JOHNSTON ABRAHAM, the author of "The Surgeon's Log," a very delightful book of travel, is an Irishman, or at any rate was educated in Ireland, and we are sure he will not mind our frivolity when we say that in *The Night Nurse* (London: Chapman and Hall, Limited. 1913. Pp. 311. Price 6*s.*), his latest book, he reminds us of Gilbert's Lord Chancellor, whose occupation consisted in "giving agreeable girls away." Yet Dr. Abraham writes with the proper element of tragedy mingled with comedy. The purely professional portions of the book are exceedingly well done, and the story ranges from grave to gay, in a manner characteristic of the land where the scene is laid.——A thrilling story with a strong psychological interest is *The Blue Wall*, by RICHARD WASHUM CHILD (London: Constable and Co., Limited. 1912. Pp. 378. Price 6*s.* net). It contains a study of a successful struggle against the morphine habit written by the heroine during her voluntary solitary confinement, which is very accurate and graphic. The rest of the book, however, is a jumble of psychology, genetics, and occultism with no particular scientific interest. ——The author of *The Triuneverse: a Scientific Romance* (London: C. Knight and Co. 1962 (*sic*). Pp. 221) does not reveal his identity further than by describing himself as the author of "Space and Spirit." Whoever he is, he has considerable acquaintance with physical science and the gift of clear exposition, so far as the subject admits of it. There is a slender framework of story, the object being to set forth a theory of the structure of the "Triuneverse," made up of a physical series that forms a multiverse, which merges into an organic series forming an organiverse, this in turn developing into a spirituverse. The whole forms the triuneverse; and that "to the height of this great argument" the anonymous author (the average reader can certainly not follow him there) successfully attains, is perhaps doubtful.

Microscopy is now such a large and important subject that a small book dealing with the matter is hardly likely to appeal to medical men; nevertheless, they may often be asked by friends to recommend a simple book on the microscope, and they may be glad to know of *The Beginner's Guide to the Microscope*, by CHARLES E. HEATH, F.R.M.S. (London: Percival Marshall and Co. 1912. Pp. 119. Price 1*s.* net), which gives all the information that the novice is likely to require in his early investigations. With this book, and perhaps one dealing with objects for the microscope, the amateur will be sufficiently equipped as regards literature until the attractions of his hobby make him require more advanced treatises, of which there is a useful list at the end of the book under notice.

JOURNALS AND MAGAZINES.

The Journal of Physiology. Edited by J. N. LANGLEY, Sc.D., F.R.S. Vol. XLVI., No. 1, March. London: C. F. Clay, Cambridge University Press. Pp. 80. Price 5*s.*—G. R. Mines has a paper on Summation of Contractions. He used the intramuscular nerves of the sartorius with finely graded stimuli, the heart of frog, and torpedo. From his experiments he concludes that liberation of acid in the muscle as a result of excitation precedes the act of shortening and possibly causes it. His other conclusions are formulated in the text.—A. V. Hill contributes a highly technical paper on the Energy Degraged in the Recovery Processes of Stimulated Muscles, which is a continuation of a paper published in 1911. By means of a new thermo-electrical apparatus the rise of temperature of a muscle may be estimated to within a millionth of a degree. In a muscle excited in oxygen the production of heat is continued for long periods after the mechanical response is over. In a muscle left in nitrogen there is no trace of heat production after the contraction is over, but if it be transferred to oxygen the same amount of heat production as is normal occurs after the contraction is over. It is suggested that the processes of muscular contraction are due to liberation of lactic acid from some precursor, and that oxygen in all living tissues is used largely in the oxidations, whereby the molecular machine, like a steam-engine charging an accumulator, builds up bodies containing considerable amounts of free energy, which, as in the accumulator, can be discharged whenever desired on subjecting the tissues to appropriate stimuli.

L'Hygiène. March, 1913. (Messrs. Goupil and Co., 25, Bedford-street, London.)—The current issue of this interesting and well illustrated review contains two articles of particular interest at the present moment. The first is L'Hygiène du Soldat, by Dr. Horace Bianchon, which is concluded in this number. At the present moment, when five nations in Europe are still under arms, and six others are placed in such relations to each other and to the belligerents that, remote as the probability may now be, it is possible that they too should be involved, the question of the health of the soldier is of the greatest possible importance. Dr. Bianchon describes the responsibilities of the medical officer

of the regiment very well, pointing out that he has to be an all-round man if he is to give satisfaction and to feel that he is discharging his responsibilities. He must, for example, be able to satisfy the military authorities as to the absolute necessity of certain soldiers being placed on the sick-list, and he must at the same time be able to "dépister les ruses," by which many malingerers will attempt to avoid the discharge of their duties. This means that he must be a good diagnostician; also he must be rapid in his decisions, a skilful surgeon, and an able administrator. Dr. Bianchon's article is not written with regard to the duties of the military surgeon in times of war, he is discussing the methods of maintaining the health of the soldier while with the colours; but it follows that the more perfect the administration of the medical service of a nation is in times of peace the more effective will the army be as a fighting machine. For first, the number of healthy men in the army will be larger if hygienic precautions are duly taken; and secondly, the routine for coping with the pathological results of war—disease as well as injury—will only operate satisfactorily under stress if it can be tested with deliberation. The other article in this issue of *L'Hygiène* which calls for notice is a symposium on the subject of depopulation, in which are collected the opinions of Dr. Löwenthal, the late Professor Lannelongue, Dr. Bertillon, Dr. E. Labat, M. Klotz (the French Minister of Finance), Professor Hayem, Professor Pinard, M. Paul Strauss, Professor Chantemesse, Dr. Jacquet, and lastly M. Gustave Mesureur, Director of the Assistance Publique in Paris. The general conclusions which are come to by M. Henri Meurisse as a result of the interesting evidence which he has got together are:—(1) that the depopulation in France, which has become critical, is the consequence of the social conditions, the improvement of the lot of the individual conducing to the diminution of the race; and (2) that, serious as the matter is, the remedy lies not in improving the public health so much as in the alteration of public manners. Is it possible, the conclusions ask, for some legal enactments to restore to the French nation *la goût de famille?* The various opinions of the able men which have been collected in this essay will be read with great interest, but we do not quite see in what direction the law can help other than by combating alcoholism, tuberculosis, syphilis, criminal abortion, and, where possible, the various causes of infantile mortality. Such legislation, however, is made to insure the promotion of public hygiene, and can only in an indirect way be considered to promote and encourage domesticity. In short, the reasons for desiring a logical plan upon which to fight a growing danger are set out in this symposium, but the terms of such a plan are only barely suggested.

Quarterly Journal of Experimental Physiology. Editors: E. A. SCHÄFER, F. GOTCH, W. D. HALLIBURTON, C. S. SHERRINGTON, E. H. STARLING, and A. D. WALLER. Vol. VI., No. 1. London: Charles Griffin and Co., Limited. Pp. 108. Price 7*s.* 6*d.*—W. Cramer and Harold Pringle record their experiments on the Coagulation of Blood. They find that oxalate plasma, when filtered through a Berkefeld filter, does not clot on the addition of calcium chloride. Some of the phenomena which have been attributed to the chemical or physical properties of the unorganised constituents of the plasma are in reality due to behaviour of the living cellular elements, and amongst these the platelets play a most important rôle.—W. Gavin finds that the administration of extracts of pituitary body and corpus luteum to dairy cows, by the mouth or by subcutaneous or intravenous injection, causes practically no alteration in the total quantity per diem or in the quality of the milk.—E. A. Schäfer records the effect of pituitary and corpus luteum extracts on the mammary gland in a young married subject nursing her second baby. There is ample evidence of the positive effect of these extracts, especially as regards the pituitary extract. It is desirable that more observations of this nature should be made.—C. M. Gruber finds that natural and artificially aroused impulses in the phrenic nerve, which is a mixed nerve containing both afferent and efferent fibres, can be arrested by an electrical, block, and by freezing mixtures, especially by liquid air.—T. Graham Brown continues his elaborate researches on the Physiology of the Nervous System, and in this (the twelfth) contribution deals with Rhythmic Responses in the Simple Reflex—Progression—Scratch.—F. R. Miller records his results on Reactions of the Salivary Centres. Stimulation of the central end of the lingual nerve—lingualis reflex—amongst other effects causes abundant secretion from the ipsilateral submaxillary gland. Similar stimulation of the glosso-pharyngeal nerve causes similar results in the parotid of the same side, while stimulation of the central end of the vagus—gastric vagus reflex—causes secretion from the submaxillary and parotid glands, but the threshold is high. The salivary reflexes are independent of the associated muscular reflexes. The chorda tympani contains afferent fibres for the salivary reflex. The salivary secretion of curare poisoning is caused by asphyxia. In the bulb two points can be localised: stimulation of the one causes parotid secretion, of the other submaxillary secretion.—P. T. Hering contributes Further Observations upon the Comparative Anatomy and Physiology of the Pituitary Body of Cyclostomes (lamprey and myxine), Elasmobranchs (skate), Teleosts (cod), Amphibians (toad and frog), Reptiles (tortoise and green lizard), and Birds (fowl, starling, and thrush). From his observations the author concludes that the presence of active physiological principles in the pituitary body is associated with a tissue of nervous origin—the pars nervosa. There is reason to believe that the granules therein contained are representatives of the active principles, and that they are products of part of the epithelial lobe—pars intermedia—carried to, elaborated in, and stored by, the pars nervosa.

Jahreskurse für ärztliche Fortbildung. February, 1913. Munich: Lehmann. Price 18 marks per annum.—The February number is devoted to a review of recent work in relation to diseases of the heart and lungs. Professor Hoffmann, of Düsseldorf, writes on irregularity of the heart beat. The methods of study in clinical work are auscultation, palpation, the sphygmograph, sphygmocardiochronograph, and electrocardiogram. The work of Mackenzie and Lewis is described in some detail. According to Engelmann, the nervous control of the heart influences it both positively and negatively in four different directions, the rate (chronotropic), the response to stimulus (bathmotropic), the conductivity (dromotropic), and the contractile power (inotropic). The various forms of cardiac irregularity are classified under the headings of sinus arrhythmia, including the juvenile respiratory arrhythmia and the tachycardias; the ectopic arrhythmias, including extrasystoles and extrasystolic tachycardia (heart galloping); the various forms of heart-block, absolute irregularity, and pulsus alternans; sphygmograms and electrocardiograms are given illustrative of these conditions. The treatment is briefly discussed, and also the prognostic import.—Velden contributes an article on the physical diagnosis of heart affections, and the significance of variations in the size, motility in the chest, and the heart sounds.—Stähelin, after a brief dissertation on the relations between the lungs and the circulation, discusses treatment by means of the various tuberculins. He passes in review Koch's old tuberculin, describing how it is used in diagnosis. For treatment, doses of 1/10 mg. twice weekly

are recommended, but if this causes fever 1/100 or even 1/1000 mg. may be used. It is most useful for early apyrexial cases, but may be used also in the presence of fever. New tuberculin (T.R.), bacillary emulsion, Denys' tuberculin, and Beraneck's tuberculin are then described. The last, prepared by Beraneck, in Neuchâtel, contains an albumose-free bouillon culture extracted with phosphoric acid. It is put up in various dilutions, one recommended for treatment being A/64 in 1/20 c.c. doses (Sahli), increased if no reaction appears up to $\frac{1}{2}$ c.c. Rosenbach's and Landmann's tuberculins are also mentioned. Opinion differs widely as to which of these is the best, and some think that they all contain the same active principles. Tuberculin ought not to be used when there exists a generalised tuberculosis, diabetes, or other systemic disease.

New Inventions.

PILLOW AND STRAPS FOR MAINTAINING THE "FOWLER POSITION."

THE comfort of these straps to both patient and nurse has been demonstrated by a trial extending over three years. The pillow is 2 feet in length and 1 foot in width, is stuffed firmly, and is covered with mackintosh. In the centre of one side a semicircle is cut. Two webbing straps are attached to one face of the pillow in its long axis, the adjacent ends of these straps converging to terminate in a buckle at each end of the pillow. Two separate straps, having at one end a leather loop, connect at this end with the head rail of the

bed, and at the other end with the buckles on the pillow. The pillow and straps are devised for maintaining, not for dragging the patient into the Fowler position. The method of use is for the patient to be supported, at the required angle, on a bed rest. The two loose straps are looped to the top rail at the head of the bed about 2 feet apart. If the head rail of the bed is on a lower level than the shoulders of the patient, the straps must pass from the bed rail up over the top of the bed rest and then under or outside the patient's arms down to meet the buckles. The pillow with its straps below—i.e., next the bed—and the edge with the semicircular gap upwards (next the rectum) is covered with a warmed towel and slid across the bed beneath the thighs reaching up to the buttocks. The ends of the straps from the head of the bed are passed through the buckles of the pillow. A nurse on each side of the patient, with one hand under the pillow, first gradually raises the pillow and thighs and then, with the other hand, tightens the straps in the buckles. These straps must be tightened equally until they are quite taut. On removing the hands from beneath the pillow the patient is supported on the seat of a swing, but the seat of the swing—the pillow—rests, not against the buttocks, but against the back of the thighs immediately in front of the buttocks. The soles of the feet are supported on an ordinary pillow. The semicircular opening, lying opposite the perineum, allows access to the urethra and rectum and is especially useful if saline solution is being administered per rectum.

Messrs. Allen and Hanburys, Limited, of Lombard-street, London, E.C., have, at my request, undertaken the manufacture of these straps.

C. HAMILTON WHITEFORD, M.R.C.S. Eng., L.R.C.P. Lond.

Plymouth.

LISTER MEMORIAL FUND.

THE contributions recently made to the Lister Memorial Fund include the following:—

	£	s.	d.
Aldershot Medical Society	1	12	6
Bedford Medical Society	2	2	0
Bolton Medical Society	2	2	0
Cardiff Medical Society	5	5	0
Clothworkers' Company	100	0	0
Corporation of the City of Glasgow	52	10	0
Devon and Exeter Medico-Chirurgical Society	2	2	0
Eastbourne Medical Society	10	10	0
Folkestone Medical Society	1	1	0
Grocers' Company	52	10	0
Halifax Medical Society	2	2	0
Harveian Society	10	10	0
Huddersfield Medical Society	5	5	0
Ironmongers' Company	25	0	0
Jersey Medical Society	5	5	0
Leicester Medical Society	3	3	0
Manchester Cooperative Wholesale Society	21	0	0
Manchester Medical Society	3	3	0
Mercers' Company	105	0	0
Merchant Taylors' Company	262	10	0
Newcastle-on-Tyne Clinical Society	5	5	0
Pharmaceutical Society	10	10	0
Physiological Society	10	10	0
Reading Pathological Society	2	2	0
Rochdale Medical Society	1	1	0
Royal College of Physicians	21	0	0
Royal College of Surgeons	52	10	0
Royal Dublin Society	50	0	0
Royal Horticultural Society	52	10	0
Royal Microscopical Society	5	5	0
Royal Sanitary Institute	5	5	0
Royal Society	50	0	0
Skinners' Company	105	0	0
Society of Apothecaries	52	10	0
Southampton Medical Society	2	2	0
Southport Medical Society	3	3	0
Torquay Medical Society	3	3	0
York Medical Society	2	2	0

Among the subscriptions from individuals is a donation of 500 marks from Professor Ehrlich and one of £100 from Lord Strathcona.

Committees for the purpose of collecting subscriptions have been formed by the Universities of Oxford, Cambridge, and Durham, and other Universities are also making efforts locally to promote the success of the memorial. Arrangements have also been made for the formation of committees in the British Dominions beyond the Seas and in foreign countries.

The proposed memorial will be of a threefold character, and consist of: (1) a simple marble medallion bearing a sculptured portrait of Lord Lister to be placed in Westminster Abbey among the monuments of the nation's illustrious dead; (2) a larger and more conspicuous monument to be erected in some public place in London; and (3) the founding of an International Memorial Fund from which either grants in aid of researches bearing on surgery or rewards in recognition of important contributions to surgical science will be made, irrespective of nationality. A considerable sum of money is required to carry out these proposals. Donations should be sent to the Treasurers of the Fund, at the Royal Society, Burlington House, London, W.

THE LATE DR. EDWARD ADRIAN WILSON.—March 27th being approximately the anniversary of the death of Captain Scott and his companions on the return from the South Pole a year ago, an impressive service was held in the chapel of Cheltenham College in memory of Dr. E. A. Wilson, an old Cheltonian. The Principal, Canon Waterfield, in the course of his tribute to the deceased, said that Dr. Wilson had hoped on his return from the South Pole to enter the ministry of the Church. The canon also quoted a letter written to a friend by a member of the expedition, in which the writer said: "Words must always fail me when I talk of Wilson. He really is the finest character I have ever met. Every quality is so solid and dependable, sound, shrewdly practical, intensely loyal, and utterly unselfish. He is the most popular member of our party."

THE LANCET.

LONDON: SATURDAY, APRIL 12, 1913.

The Care of the Mentally Deficient.

IN fulfilment of the promise made on behalf of the Government when the withdrawal of the Mental Deficiency Bill was announced last year, the Home Secretary has introduced into the House of Commons a measure on similar lines, which, so far as the Parliamentary omens of the moment will allow of a forecast, seems likely to pass into law during the present session. There is the more reason to entertain this hope in that the provisions of the new Bill, a comprehensive abstract of which appears elsewhere in our columns, are in some respects more limited in their scope, and therefore less likely to arouse prejudice and afford opportunity for misunderstanding and misrepresentation than were Mr. MCKENNA'S original proposals. It will certainly not be a matter of regret to those who most keenly realise the gravity of this problem, if it has been found possible, without the sacrifice of any essential principle, to meet criticism which had its source—and this was undoubtedly the case with much, at all events, of the opposition to the abortive measure of last session—in a genuine and conscientious, if quite groundless, fear lest measures for the control of the feeble-minded should be abused and perverted to the violation of the rights of the individual citizen. The safeguards provided in the present Bill should satisfy even the most exacting critic that any risk of this sort is entirely illusory. What is perhaps more to be feared is that these elaborate precautions against abuse may be found in practice to hamper so largely the operation of the measure as to curtail to some extent its utility and to deter judicial authorities from applying its provisions in face of ignorant or interested opposition. It may be hoped, however, that public opinion on this question, which has developed so remarkably within the last few years, will be strong enough to cope with this difficulty should it prove serious.

The Bill now before Parliament, though embodying the same general principles as last year's measure, differs very widely from it in some details of considerable importance. Apart from the greater limitation of its scope, to which reference has already been made, the most notable of these differences is in respect of the central authority for the administration of the proposed Act. In accordance with the amendment adopted when the matter was discussed in Committee last session the present Bill entrusts this duty to the Lunacy Commissioners, the constitution of that body being modified, its numbers increased, and its title changed to that of the Board of Control. It is provided that a certain number of the members of the Board, including all the medical members, shall be appointed by the Home Secretary, while the legal representatives are to be nominated, as heretofore, by the Lord Chancellor. This arrangement, which establishes a single central authority for the care and control of the insane and the feeble-minded, and which brings that authority into intimate relation with the Home Office, appears to be acceptable on grounds alike of logical propriety and of practical convenience. It should meet the views of those who recognise the importance of assimilating the treatment of the feeble-minded to that of the insane, while at the same time it will, no doubt, secure for the guidance of the new administrative body the valuable experience acquired by the Departments of the Home Office which have had to deal for many years with criminal defectives and inebriates. And as these latter categories of the mentally deficient will probably be amongst the first to be brought under the operation of the Act, their transfer to the jurisdiction of the new authority will now be a much simpler process, and will be attended with much less risk of friction than would probably have been the case had the administration of the Act been entrusted to a totally distinct board, independent of and unconnected with the Home Office. Moreover, it may be expected that the incorporation of the Lunacy Commissioners under their new style in this department of the Government will have indirect results of an important and beneficial character by bringing the influence of alienist opinion into effective contact with those other branches of Home Office administration, which in prisons, in reformatories, and in inebriate institutions have to deal with populations so largely recruited from the ranks of the degenerate and the mentally abnormal. The advantages that should accrue to the work of these departments from a fuller recognition of the point of view and the methods of psychiatry are too obvious to need more precise indication. For these various reasons, then, the proposals in the new Bill with regard to the central authority appear to be preferable to the scheme originally put forward; they utilise the existing machinery, while at the same time they facilitate its modification so far as may be found necessary to adjust it to the new functions which it will have to fulfil. Another important point in which the present Bill shows an improvement on its predecessor is with respect to the definition of mental deficiency. The difficulty of framing a definition, scientifically accurate, and also suitable for adoption in an Act of Parliament, is quite as formidable in the case of feeble-mindedness as it has notoriously proved to be in the case of insanity; and the attempt made in last year's Bill to construct a fitting formula for the purpose was hardly attended with such success as would encourage further effort in this direction. The difficulty is met to some extent in the present Bill by including in the definition clause a specific reference to the several categories of defective persons who are liable to be dealt with under the compulsory powers of the Act, as, for instance, defective persons who become amenable to the ordinary criminal law or to the special legislation for inebriates. In this connexion it may also be noted that occasion has been taken to repair a rather remarkable omission in the former Bill by adding a clause requiring that there must be a medical examination before an order is made under the Act.

While the provisions of the Bill may, in a general view, be regarded as sound and well-considered, it may be questioned whether the administrative machinery which it

proposes to set up will prove to be adequate to the amount and complexity of the work that it will have to do. This doubt will be felt more particularly with regard to the medical representation on the Board of Control, which, as the Bill stands at present, is left at the same strength as on the existing Lunacy Commission. It is, however, notorious that the number of medical Commissioners in Lunacy is even now absurdly insufficient for the heavy and responsible duties which they are required to perform in the supervision of the certified insane; and it is barely reasonable to expect that these hardly worked officials are to find additional time in which to organise and carry out the details of a novel, and to some extent an experimental, policy. And these considerations will appear still more cogent when it is borne in mind that the duties which will devolve on the Board of Control in connexion with the feeble-minded will not be simply duties of supervision and inspection, as are in a great measure the duties of the Commissioners under the Lunacy Acts. The provisions of the Mental Deficiency Bill already indicate that the central authority will have to deal regularly with questions as to the propriety of discharge or continued detention in the case of individual defectives—that is to say, with what are virtually questions of diagnosis; and it is safe to predict that this tendency will become stronger as time goes on. For mental defect, unlike acquired insanity, is by its nature a permanent condition, and it is a condition, moreover, which lacks those distinctive symptoms that furnish the ordinary data for certification. On account of these two characteristics the procedure in the case of the defective cannot be the same as in the case of the lunatic. Hence it may be foreseen that, for the avoidance of the confusion which would inevitably result from personal and local divergences of practice, it will very soon be found necessary to establish definite criteria by which the existence and degree of defect may be ascertained, and any such system will presumably imply the intervention of a central authority with expert knowledge, which would naturally be provided by the medical element on the Board of Control. Though such an evolution may not be contemplated by the framers of the present Bill, its probability will be obvious enough to those who have had practical experience in dealing with the feeble-minded; and it might be preferable that provision should be made for this development at the outset, instead of waiting for conflicts of doctrinal opinion and disputes as to procedure.

The Milk and Dairies Bill.

IT is almost superfluous at this date to recall the grounds on which legislation is required to secure a purer milk-supply in this country. The exact proportion of the milch cows in England which are tuberculous cannot be accurately stated, but if it were only one in a hundred, which is certainly an underestimate, it represents a danger of the first magnitude to a host of children, and probably to a not inconsiderable number of adults also. Not a year passes without evidence, from the investigations made by medical officers of health and bacteriologists, of outbreaks of other infectious diseases, such as scarlet fever, enteric fever, and the sore throat associated with mastitis of the cow, which have been caused by the infection of the original milk or its subsequent contamination. The domestic boiling of milk, which would destroy the bacilli of these diseases, has been advocated by sanitarians for half a century, but the fact must be faced that few people will do it, and the nation as a whole is not likely to abandon its preference for milk in the uncooked state. If a census could be taken of the households of medical men in the country—or even of medical officers of health alone—we should be surprised if habitual boiling of milk was found to be the rule and not the exception. The proposal that all milk before delivery to the consumer should be required by law to be pasteurised is open to several serious objections, while it would be almost impossible to check the efficiency of the processes adopted. The supply of milk, therefore, must in the public interest be protected from specific infections, and ought also to be safeguarded against the great variety of potentially dangerous contaminations which it so often receives in the course of its journey from the cow to the customer. There are few sanitary matters of which this country has so little cause to be proud as the methods which are so commonly adopted in the storage and conveyance of milk. Only indifference resulting from long familiarity with bad habits can explain the continuance of the entirely unnecessary dirt contamination which is so often witnessed when milk churns are conveyed by rail or taken through the streets on the milk round; and here also the result is shown in a toll of infant life, particularly from epidemic diarrhœa. Further, it is well known that much systematic sophistication of milk takes place, favoured by the ease with which penalties can be evaded by the defence of "warranties," and that in this way a widespread impoverishment of this most important part of the food of the people is brought about.

It is now universally acknowledged that the various Acts and Regulations under which impurities and infections of milk can be controlled are inadequate in themselves and are very unequally administered, and that in this respect the provisions of the several Public Health Acts, the Infectious Disease Prevention Act, and the old Contagious Diseases of Animals Acts, need to be revised, strengthened, and consolidated in a single enactment. This reform, which is demanded on behalf of the public by those authorities who at present are responsible, has also been strongly urged of late years by the more far-seeing section of the milk industry. The Government have long been understood to be pledged to new legislation; but it is unfortunately true that for some years past their performance in the matter has been regrettably feeble. The situation seemed changed for the better towards the end of the last session of Parliament, when Mr. JOHN BURNS introduced a new Milk and Dairies Bill, apparently with the object of making its provisions known in advance, so that real progress could be made with it in the present session. This Bill, which we discussed and welcomed in our issue of Dec. 21st last, has now again been formally introduced, and we trust that Mr. BURNS will not omit any effort to secure its passage, and thus remove what has threatened to become a standing reproach to the central

public health department over which he presides. The Bill in its main lines seems to have met with approval, though some of its clauses have received considerable criticism from medical officers of health and the different local authorities which will be concerned in giving it effect. The principle of relegating to future departmental regulations important matters such as the control over the sanitary arrangements of cowsheds and the cleanliness of milking, the system of registration of dairies (which in the Bill include not only dairy farms and cow-byres, but also milk shops and other premises where milk is obtained or stored), and the details of their inspection, has, we are glad to note, received general acceptance. Departmental regulations can be varied if they are found unsatisfactory in experience, and no new measures of reform in connexion with such a complex and important industry as the milk trade can be so perfect as not to call for fairly frequent adjustments in practice. The principal objections which have been urged to the Bill relate to the choice of the executive authorities that has been made. The Bill places most of the administrative duties on district councils and county councils concurrently, the latter authority having supervisory powers, but in "rural" districts the county council is to act to the exclusion of the district council for certain purposes, such as making investigations into complaints that infectious disease has been caused by milk sent out of the district, and making orders to stop the sale of infected milk. County medical officers of health, if we may judge by a recent contribution to *Public Health* by Dr. W. G. SAVAGE, see many difficulties in taking responsibility in a sort of patchwork over their counties. On the other hand, whole-time district medical officers of health, especially those who act for combined areas, have pointed out that they could themselves exercise the necessary supervision and control more efficiently than is practicable at a county centre. This contention has been forcibly expressed in the case of the eastern portions of Surrey by Dr. A. E. PORTER in his annual report for the Reigate district. It must be realised, however, that when the new Order of the Board of Agriculture relating to the slaughter of tuberculous cattle, with a view to compensation, has taken effect next month a strong reason will be furnished for control being exercised in health matters by the same authorities which carry out the veterinary work.

Criticism has also been expressed of the proposed repeal of the "milk clauses" in several local Acts which gave the health authorities power to trace infected milk back to the farm in the country and stop its supply to the city. It has been contended that these powers should remain at any rate for a few years after the passing of the Act, until these cities are satisfied that the county supervision is adequate. At a recent discussion at the Royal Sanitary Institute Mr. HERBERT JONES drew attention to the invidious position in which medical officers of health may be placed in carrying out their duties under the Bill, and it is suggested that clauses should be added to provide for security of tenure of district medical officers of health, analogous to those relating to county officers which were introduced a few years ago into the Housing and Town Planning Act. We trust that the Bill will be given its second reading as soon as possible, so that these and similar matters of administrative detail may be fully dealt with in committee. As we before have pointed out, it is in favour of the prospects of the Bill that in several points it already represents a working compromise between the more extreme demands of public health administration and the opposition which was at first made in the interests of the milk industry, and critics on both sides may now do well to remember that the best is sometimes the enemy of the good.

Unexpected Recoveries from Insanity.

THE cases which Dr. LEWIS C. BRUCE, of Murthly Asylum, records in another column of THE LANCET present features to which it may be well to direct attention. In one case a confirmed epileptic of many years' standing was apparently cured—in so far as an interval of eight years of freedom from seizures may be said to constitute a "cure"—by the withdrawal of 40 c.c. of blood from the median basilic vein once a week for six consecutive weeks. In the second case, a patient with cyclical insanity of manic-depressive type, it was discovered that her blood contained a specific agglutinin to a variety of streptococcus obtained by Dr. BRUCE from the blood of another patient who suffered from acute mania. By feeding the former on living cultures of this streptococcus a striking improvement set in, and whereas prior to the date of treatment—October, 1905—her attacks of insanity occurred every year, and sometimes frequently in the year, from that time to the present there has been no relapse. A third case is that of a patient with what appeared to be chronic delusional insanity, who contracted scarlet fever, and in whom convalescence from the fever was accompanied by complete disappearance of the delusional symptoms. For three years she has been quite well. The fourth case is that of a patient with delusions of identity, a morose, impulsive, absolutely intractable woman, to quote Dr. BRUCE'S own words, who after four years of this condition suddenly became unconscious one day, developed a right hemiplegia with aphasia, followed by high irregular fever, and when, some five weeks later, she had recovered to a great extent from the effects of the "stroke," it was found that her mental condition was entirely normal, apart from a complete retrograde amnesia for the events of the preceding four years. She was discharged recovered, went into service, and has apparently kept in good health since—i.e., for almost five years.

Each of these four cases presents points of interest, and three of them have this in common, that an alteration in the psychical state was effected through the agency of another form of disease. The case of recovery of a maniacal patient after being fed by streptococci presents difficulties; the technique here must be above reproach, and other experiments with every precaution against error would be advisable before any conclusions are drawn from it. Further, it is possible that in the last case narrated the intercurrent disease was not cerebral hæmorrhage, as Dr. BRUCE is inclined to think, but encephalitis; in other words, a toxi-infective condition. The fever, which was one of the

notable symptoms, is in favour of such a diagnosis, while the age of the patient (27) is somewhat against the likelihood of hæmorrhage. However, be this as it may, the case is of great interest. It is fairly well recognised that the incidence of an intercurrent affection may have a curiously ameliorating action on the course of a pre-existing disease, and instances will no doubt occur to the reader. We know of a patient suffering from a well-established delusional insanity who, in suicidal mood, threw herself out of a window, sustained a fracture-dislocation of the lumbar vertebræ, and from that date her mental symptoms vanished and have not returned. It is difficult to appreciate the real meaning of such a course of events; the difficulty is not, perhaps, so great in cases where the morbid process that supervenes is definitely toxic or toxi-infective, as in various recorded examples, and in one or two of those given by Dr. BRUCE. Nor need there be any insuperable difficulty in explaining the interesting amnesia of the fourth case of Dr. BRUCE, for if an ictus, such as a blow on the head, can occasion a retrograde amnesia, there seems to be no valid reason why the ictus of a sudden hæmorrhage or encephalitis should not be capable of producing a similar result in a particular case. We have heard of an old gentleman noted for his devoutness and religious nature who, ever since an attack of right hemiplegia without aphasia, has had the greatest difficulty in retaining or expressing his conceptions of the Deity, and admits that to his distress he seems to be unable to recall the familiar truths of his religion.

It is well that the profession should hear of such instances as Dr. BRUCE records, for they serve to show how alterations in what were once thought the intangible and inaccessible realms of the insane mind can be brought about by definite encephalic processes. We cannot agree with those who would limit the possibilities of cerebral localisation; after all, if a cerebral tumour can effect changes in a man's disposition, character, and temperament, then these features of his psychical "make-up"—to employ a useful if colloquial Americanism—must have some anatomical substratum, and we welcome all evidence that will aid in the elucidation of the interrelations of the two. To lay too great stress on scanty data would be injudicious; nevertheless, it is equally a mistake to ignore them. Dr. BRUCE'S cases further illustrate the startling nature of some recoveries from a condition of insanity—recoveries not merely unexpected, but previously regarded as quite improbable. And the same may be said for the remarkable recovery described in a letter this week by Dr. J. BATTY TUKE. Such cases indicate, it must be confessed, our comparative ignorance of the nature of not a few pathological mental states, but their suggestiveness will be noted by the alienist and physician.

ROYAL INSTITUTION. — On Tuesday next (April 15th) at 3 o'clock, Professor W. Bateson delivers the first of two lectures at the Royal Institution on the Heredity of Sex and Some Cognate Problems, in continuation of those delivered before Easter. The Friday evening discourse on April 18th will be delivered by Dr. T. M. Lowry on Applications of Polarised Light; and on May 2nd by Mr. H. G. Plimmer on Blood Parasites.

Annotations.

"Ne quid nimis."

THE CONTROL OF PETROL.

IN 1908 a Departmental Committee was appointed to inquire into the sufficiency of the existing regulations relating to the storage, use, and conveyance of petroleum spirit, and to report what further precautions, if any, were in their opinion desirable as tending to diminish the dangers attendant thereon. In 1910 the committee presented their first report, but certain evidence was not forthcoming; this, however, has since been obtained, and has enabled them to present their final report which was issued last week. In this report provisions are recommended in regard to the conveyance of petroleum spirit by road, and further powers, it is suggested, are to be conferred upon harbour authorities in connexion with making by-laws under the Petroleum Acts. It is also recommended that, generally speaking, the provisions of existing Acts—to wit, the Petroleum Act of 1871 and the Explosives Act of 1875—should be more strictly enforced by local authorities. In regard to the conveyance of petroleum spirit in the river Thames, in particular (to the dangers of which considerable attention has been drawn), the committee uphold the views of the Port of London Authority that tank steamers shall not be allowed above Thameshaven, although they have decided to allow greater facilities for the conveyance of petroleum spirit up the river in licensed tank barges, by increasing the capacity of the barges and by allowing self-propelled barges having engines of a certain type. Recommendations are also made with respect to the safe storage of petroleum for trade purposes and to the domestic use of petrol. The use of petroleum spirit hair-washes in hairdressing establishments should, in the opinion of the committee, be prohibited, and it should be made illegal, they add, to use petroleum spirit or mixtures containing it "on the hair of the living subject." It should be made illegal, they also think, to allow any petroleum spirit to escape into any inlet or drain communicating with a sewer. As regards the keeping of petroleum spirit for use in motor vehicles, no great change appears to the committee to be necessary. It is suggested, however, that a certain regulation should be amended allowing of two spare tins being carried on a motor-car without notification to the local authority, and that a regulation should be added making it compulsory to keep a supply of dry sand or some suitable substitute in every storehouse or garage. As a whole, the report seems to present useful, temperate suggestions, inflicting no hardships, while at the same time offering better protection both of person and property from a highly inflammable material, the increasing use of which is a feature of modern times.

MEDICAL EXAMINATIONS IN SWITZERLAND.

THE regulations for the Swiss medical examinations of 1877 and 1886 have been completely revised. The new regulations, dated Nov. 29th, 1912, come into force for the first time this spring. The examinations still take place at the principal university towns—Basel, Berne, Geneva, Lausanne, and Zürich—and are conducted in German or French (Lausanne and Geneva). (The innovations in the new regulations are marked in italics.) Only persons who have passed the Swiss Matriculation Examination are admitted to the three medical examinations—first, second, and final. The successful passing of the final examination provides the candidate with a Swiss Federal diploma and admits him to

practise in any canton of Switzerland. The M.D. examination is separate, and has solely an academical or scientific value. The first medical examination is oral and deals with four subjects—viz., physics, organic and inorganic chemistry, botany, and zoology. (*Foreigners with recognised diplomas can be exempted from this examination.*) The subjects of the second examination are anatomy, histology, embryology, and physiology, and it is partly practical (dissection), partly oral, and partly written. Admission to the final examination is granted after 11 half-yearly terms of study, six of which must be spent in Switzerland. One-half year's attendance at a recognised hospital can replace one-half yearly term of study. The candidate must give proof of having attended the medical, surgical, and obstetric cliniques for two terms; the *children's* and ophthalmological *cliniques*, the medical and surgical out-patient department, the mental hospital, and the *oto-laryngeal clinique* for one term. The candidate, in addition, must pass practical and theoretical examinations, the latter both oral and written, in the following subjects: pathological anatomy, internal medicine, surgery, obstetrics and gynæcology, ophthalmology, *pædiatrics*, *dermatology and neurology*, mental diseases, hygiene and *legal medicine*. There is also an oral examination in the *surgery of accidents* (*Unfallkunde*) and materia medica. For written examinations four hours are allowed; the spoken examinations generally last half an hour for each candidate.

MARCH AT HOME AND ABROAD.

MARCH lived up to its reputation for boisterous winds. Gales on various parts of the coast were very frequent, and sometimes unusually severe, while high squally winds and even gales were not uncommon over inland districts. The main direction of the wind, however, was from some point of the compass between south and west, and the atmosphere was consequently less dry than during the proverbial March, and the temperature rather high. There were, nevertheless, no very warm days such as sometimes occur during a March with a much lower mean temperature. Maximum readings above 55° were seldom experienced even in the warmest portions of the kingdom, although the thermometer mounted to between 50° and that figure on the majority of days. Night frosts were few and rarely severe; in the Midlands and North of England there were only about eight occasions when the screened thermometer descended below 32°. At the Kew Observatory frost was recorded on six nights, the lowest temperature being 28°, but the mean minimum for the month was no lower than 37°, or 1·5° above the normal. On 20 afternoons the maximum temperature was above 50°, and the mean value 51°, or rather more than 2° above the normal. Ordinarily March is one of the driest months of the year, but with the prevailing wind current in the south-west the period under review was an exception. At Kew, where a normal March gives rain on 13 days, more or less rain fell on as many as 20. There were, however, no very heavy downpours, and the aggregate fall of 2·14 in. only exceeded the average by 0·55 in. A very bright day was as rare as a dry one, and the total duration of sunshine fell short of the normal. At Kew, where the average for March is 109 hours, there were no more than 87 hours, and on no less than 12 days there was either none or less than an hour. The greater part of the midlands and north was appreciably colder than London, as well as more rainy, but not everywhere so dull. At Nottingham the mean minimum was only a trifle lower, but the mean maximum was 1·5° lower; and the total rainfall, which fell on as many as 22 days, yielded 3·42 in., exceeding the average by 1·83 in. In spite of the many rainy days, however, the sunshine at Nottingham was five hours more than at Kew. At Bath the mean maximum temperature was a fraction of a degree higher than at Kew, but the mean minimum was more than 1° lower. As at Nottingham, there were 22 days with rain, and the total fall of 3·42 in. exceeded the average by 1·37 in. The sunshine record was 21 hours less than usual, but the total of 98 hours was better than that of Kew. In the extreme south-west of England the weather was more rainy than in the south-east, but also brighter. Newquay had 23 days with rain and the large total of 4·67 in., while the sun shone for as many as 121 hours, exceeding the Kew total by more than an hour per day. The temperature at Newquay was far more equable than at places in the east and centre. The mean maximum, 50°, was only 10° higher than the mean minimum, while further west still, at the Scilly Isles, the corresponding figures were 51·3° and 42·0°. At Scilly there was considerably less rain than on the nearest parts of the coast, but more cloud, the aggregate sunshine amounting to 113 hours—eight hours less than at Newquay. Practically all parts of the Continent were much drier than this country. At Paris rain fell on 10 days only, giving a total of 1·66 in. The French capital was also warmer both at night and during the day than Kew, having a mean maximum temperature as high as 55°, and a mean minimum no lower than 38°. There were, however, in spite of the few rainy days, many more cloudy ones than is general in March. The total sunshine, 97 hours, was only ten hours more than at Kew, and many hours less than on the south-west and south coast of England. At Berlin rain fell on ten days, yielding a total no higher than 1·38 in., while the temperature, at first low, subsequently increased very decidedly, until at the end of the month it touched a maximum as high as 73°, a figure several degrees higher than any recorded at Paris, Biarritz, and Nice. The mean of the maxima, 52°, was not very high, and the mean minimum, 36°, was lower than at Kew. On the Riviera the greater part of the month was bright and dry, but some heavy rain fell during the latter half. At Nice the temperature seldom fell below 40° at night, and occasionally rose to above 60° during the day. The mean maximum equalled 58° and the mean minimum 43·5°. In the south-western corner of France, as represented by Biarritz, the temperature was more variable. Slight frost occurred on the 9th, while maximum readings above 60° were more numerous than at Nice. The mean of the maxima was as high as 59° and the mean of the minima 43·3°. Like Paris and Berlin, rain fell on ten days only, all during the latter half of the month, and except quite at the end the falls were slight or very moderate. At Madeira there was rain on only one day, and even an overcast sky was a rarity. The temperature, both during the day and night, showed a gradual upward movement compared with the previous month. The mean maximum was not far below that of June in London, the figure being 66° and the mean minimum 49°.

ANEURYSM OF THE SUPERFICIAL PALMAR ARCH.

IN the *Revue de Chirurgie* for March M. Jules Regnault and M. Bourrut-Lacouture, of the Naval Medical School, Toulon, have collected a series of records from the literature of aneurysm of the superficial palmar arch, amounting to 26 cases in all; to this they add another from their own experience which presented some interesting features. The patient, a gunner, aged 37, was healthy and free from syphilitic infection. In August, 1910, he was obliged to strike his gun heavily several times with the palm of the hand; this caused sharp but transient pain. Three weeks later a swelling of the size of a pea was noticed in the palm, and tingling sensations developed in the third and fourth fingers. These soon disappeared, so that the swelling

ceased to attract much attention, though it increased in size. When he came under the writers' observation in the following May the swelling was as large as a good-sized hazel nut; it lay in the upper border of the left hypothenar eminence and pulsated distinctly. When pressed upon it creaked faintly, like snow; and on auscultation a soft bruit was heard. The skin covering it was not discoloured or altered in any way, and there were no discoverable pressure effects. Under local anæsthesia the sac was exposed and removed; the wound healed by first intention, and no trouble followed. Comparing this method with others employed by other surgeons in cases previously reported, M. Regnault and M. Bourrut-Lacouture conclude that extirpation is the plan of choice; compression is ineffective in most cases, ligature may fail through the presence of free anastomoses, injection and galvano-puncture introduce dangerous elements without promising success, and the same may be said of simple incision. Aneurysm of the superficial palmar arch is apparently always traumatic in origin; the artery, though efficiently protected, lies in a region which is exposed to injury. In most cases the trauma has taken the form of an open wound; but in several, as in that under consideration, it was in the nature of a contusion, and constitutes an occupational accident. In one such the patient was a cab-driver, and the development of the aneurysm was ascribed to prolonged irritation by the reins and whip; another patient was an engine-driver, whose aneurysm originated in a single heavy blow with the palm of the hand on an obstinate lever. The case recorded by M. Regnault and M. Bourrut-Lacouture is therefore important, not only from the clinical, but also from the medico-legal point of view.

THE DIFFICULTIES OF PUBLIC HEALTH ADMINISTRATION.

SOME striking criticisms of the way in which sanitary matters are dealt with in Ilford are expressed by the medical officer of health of that place in his annual report for 1912. Mr. C. F. Stovin refers in detail to a number of restrictions which the district council has lately placed on his work, and considers them so harassing and to have caused so much friction that he invites the council to agree to asking the Local Government Board to hold a full inquiry by one of its inspectors into the system of sanitary administration of the district. The council, in their turn, appear to have asked the sanction of the Local Government Board to the determination of Mr. Stovin's appointment as medical officer of health, school medical officer, and medical superintendent of the isolation hospital, and it may be anticipated that the whole dispute, which is attracting much local attention, will soon come under official investigation. Mr. Stovin asserts that a continued effort has been made to support the authority of the sanitary inspector against the medical officer of health, both in regard to the control of the subordinate officers and in connexion with drainage matters. Ilford is one of the large urban districts of outer London, with a population now estimated at 83,080, and the number of inhabited houses has increased from 7649 in 1901 to 16,856 in 1911. It is at present the duty of the council's surveyor to supervise the drainage of new buildings, and afterwards all redrainage works come under the public health department. So far as concerns the latter department, Mr. Stovin states that "of 277 houses during the last three years where a drainage nuisance was believed to exist, and a notice had been served to open up the drains for inspection, 277, or 100 per cent., had been found in a defective condition and required redrainage," all these defects having been discovered as a result of complaint or arising out of visits for infectious disease. After this it is not surprising if Mr. Stovin's suggestion that the house drains of the district should be systematically tested has met with opposition from persons interested in house property and building. The matter, however, seems one of more than local importance. Those who have experience of public health work in our large towns are only too familiar with the mischief which has been caused by the faulty construction of houses and house-drains in past years when by-laws were not in existence or were not observed, and are well acquainted with the enormous burdens thrown upon the rates and individuals when the defects have to be put right. If the same kind of construction is being allowed to go on unchecked at the present day in a new district within seven miles of London the facts ought to be known and the cause fully investigated. The further developments of the dispute will be watched with interest.

BISMUTH POISONING.

LITTLE information is to be found in the text-books on bismuth poisoning, though cases can be found in medical literature for more than a century. Probably the reason is that the toxic symptoms were supposed to be due to impurities, such as arsenic and lead. In recent years, since the introduction of Beck's method of treating sinuses by the injection of bismuth paste and the use of bismuth in skiagraphy, cases of poisoning have been more numerous. In 1887 Dalché and Villjean showed that pure bismuth salts were toxic. They gave a dog daily 10 grammes of the subnitrate without observing any ill-effect, but when the salt was put on a raw surface of any extent intoxication often followed. They then made experiments by subcutaneous injection. A dog was injected with bismuth subnitrate on 12 successive days. It died on the thirteenth day. Five days before death there was noticed on the gums of the anterior molars a brownish-violet, glistening serrated line. This line extended and became superficially gangrenous, presenting softened greyish-white plaques surrounded by a brownish-violet areola. Spots of the same colour appeared in the mucous membrane of the mouth. Dalché and Villjean also observed two cases of bismuth poisoning in man, characterised by a black line and white diphtheritic membranes on the gums and bismuth in the urine. Thus the most striking feature of bismuth poisoning is stomatitis. In advanced stages the teeth fall out. In the *American Journal of the Medical Sciences* for November Dr. L. M. Warfield has reported the following case. A girl, aged 9 years, was admitted into hospital on Sept. 9th, 1911, complaining of a sore mouth. She had suffered from psoas abscess which was twice incised. In November, 1910, about 2 ounces of Beck's subnitrate paste were injected into the sinus, which promptly closed and no paste was ever extruded. Within two weeks a black line was noticed on the margins of the gums. This had persisted, becoming more or less prominent from time to time. In August, 1911, an ulcer formed on the mucous membrane of the right cheek opposite the second molar tooth. Later, the right side of the tongue ulcerated. On examination the child was found well nourished. The breath was very fœtid, the teeth were yellowish and many of them were decayed. On the gum margins of both jaws, both outside and on the inner and outer sides, was a dark, violet-black line about 1·5 mm. in depth which did not quite reach the free border The teeth were not loosened. Along the whole right edge of the tongue was a violet-black discolouration which in its widest part measured 2 cm. In its centre was a white opaque serrated membrane adherent to the underlying tissues. On the buccal surface of the right cheek were two ulcers similar to that on the tongue. A skiagram of the right lumbar region showed a shadow 10 cm. long and 2 to 4 cm. broad. Evidently almost all the bismuth remained. No bismuth, albumin, or casts

could be found in the urine. Gradual improvement took place, and on Feb. 19th, 1912, the tongue and cheek were healed and the breath was no longer fœtid, but the line on the gums persisted. A number of similar cases of bismuth poisoning have been recorded, and also about 20 deaths. From the records a typical picture can be drawn which differs from that of lead or mercurial poisoning. There are three forms: (1) benign, in which a violet-black line is the only manifestation; (2) moderately severe, in which there is more or less acute stomatitis, which is succeeded by chronic stomatitis characterised by discolouration of the gum margins and tattooing of the buccal mucosa; (3) a severe form in which ulceration occurs, secondary infection supervenes, and general symptoms, such as fever, hiccough, vomiting, and diarrhœa, occur. The bismuth line resembles the lead line but differs from it in colour. The urine may be blackish, and frequently contains bismuth and occasionally albumin and casts.

ALTERNATING OXALURIA AND PHOSPHATURIA.

IN the March number of the *Bristol Medico-Chirurgical Journal* notes are given of two cases in which a condition of oxaluria alternated with one of phosphaturia. The first is recorded by Professor F. H. Edgeworth, and is that of a man, 26 years of age, who was subject to attacks of renal colic and hæmaturia, the urine containing large numbers of oxalate crystals and being strongly acid in reaction. Under the influence of a milk diet these symptoms subsided, to recur again when a more generous regimen was allowed. A dose of sodium bicarbonate would cut short an attack, but an excess of the alkali was liable to precipitate the onset of the alternate condition of phosphaturia. This was likewise accompanied by some pain along the course of the ureter, though it was of a duller character than that encountered with the oxaluria. The difficulty thus arising was finally solved by the observation that the occurrence of the oxaluria could be prevented by careful and prolonged mastication of the food taken, being apparently due to digestive disturbance and resulting gastric acidity. The second case, reported by Dr. C. W. J. Brasher, was that of a man, aged 46, irregular in his habits, and especially in the matter of eating. He, too, suffered from attacks of lumbar pain and hæmaturia, with painful micturition and some urethritis without the presence of gonococci. Over-exertion and digestive disturbances were responsible for the onset of the condition. These attacks were always followed by phosphaturia, the urine becoming quite milky in appearance. The oxalates present in the urine are usually derived from the food, such articles of diet as rhubarb, strawberries, and spinach giving rise to large quantities of oxalate crystals in the urine, often accompanied by pain and sometimes by hæmaturia. Indeed, the condition may closely simulate renal or vesical calculus. Abnormal conditions of fermentation in the stomach may at times give rise to an endogenous formation of oxalic acid, with a similar urinary condition; but in either case the formation of actual crystals of oxalate of lime as a sediment in the urine depends less on the absolute amount of the salt than on accompanying chemical conditions, such as the acidity of the fluid and the relative proportions of calcium and magnesium salts contained in it. On the other hand, phosphates are only deposited in alkaline urine, a condition which may be produced by large doses of alkalies given as medicine, while milk diet may lead to the presence of much calcium phosphate in the urine. The avoidance of the urinary troubles by the adoption of a habit of prolonged mastication of the food taken may seem to afford some support to the theory that almost all the evils of life may be avoided by this simple procedure, one drawback to the system being, however, that the greater part of the 24 hours of the day has to be devoted to the chewing process if the strict rules are observed.

CARBOLIC ACID IN THE RAILWAY CARRIAGE.

DESIRABLE as it is to keep the railway carriage free from disease germs, there is no reason why the method adopted should leave behind a smell which is suggestive of the fever ward or worse places, and disagreeable to most people. Yet it is the practice of certainly more than one railway company in this country to use a carbolic preparation for the purpose which leaves behind it the persistent odour of the tar acid. It is not conducive to comfort to spend a long journey in an atmosphere which however suggestive of hygiene is also fraught for many with painful associations, and cannot by anyone be considered elegantly perfumed. And there is no reason why the traveller should be subjected to the nuisance, since the disinfecting process can be done in other ways which should give no offence. Possibly the management of the company consider that in the public view the smell of carbolic acid amounts to a conviction that something really sanitary has been done, and that if no evidence is left behind in the shape of a distinctive smell the company might be regarded as having been neglectful in applying common hygienic measures. We doubt whether the application of chemical germicides in the quantity, perhaps in soaps, which is employed has so good an effect as a thorough airing of the compartment, a careful washing of the floors and window frames, coupled with a good dusting of the cushions, preferably by a powerful vacuum plant. It is fairly certain that the merest traces of carbolic acid, as indicated by the faint but sickly smell which is left behind after the performance of a cleaning process by carbolic preparations, cannot be trusted to keep the air for any practical purpose permanently free from obnoxious germs. Apparently the treatment is reserved for third-class compartments, since the carbolic smell at any rate is seldom observable in the first-class carriage. Of course, the crowded portions of the train are in most need of disinfection, but surely it is not necessary to do this in a way suggestive of lavatory cleansing. If, too, the use of a germicide fluid is insisted upon, there are plenty of agents which would be equally effective, while infinitely more agreeable for the purpose.

FIBROSITIS.

THE discussion which recently took place at the Balneological and Climatological Section of the Royal Society of Medicine [1] on the subject of the affection to which Sir Williams R. Gowers gave the name of fibrositis serves as a reminder that in respect of one at least of the conditions to which the name of rheumatism has been applied our knowledge has become considerably clarified of late. It is to Professor R. Stockman that the accepted views on the pathology of this malady, more commonly known perhaps as muscular rheumatism, are principally due. He has shown that underlying the phenomena of pain and tenderness in the muscles there is a definite anatomical lesion consisting in a development of newly formed fibrous tissue situated in the fibrous attachments of the muscles and in the connective tissue lying between the fibres. Accompanying this proliferation there are also an endarteritis and periarteritis of the nutrient vessels. This suggests that the exciting cause is an irritant conveyed by the blood-vessels, though the actual agent at work has so far eluded observation. Mr. K. W.

[1] Proceedings of the Royal Society of Medicine, vol. vi., No. 4, February, 1913. Balneological and Climatological Section, Jan. 30th, 1913, p. 27.

Goadby has now endeavoured to supply this gap in our knowledge and to identify the bacterium producing the inflammatory reaction. He finds that if cultures are taken from the urine after massage of the affected parts, organisms are obtained corresponding with some of those which are found in septic conditions of the mouth, notably various streptococci, the diplobacillus necrodentalis, and a peculiar organism which gives rise to oat-shaped forms, the streptobacillus malæ. If this discovery is confirmed, we have a piece of more distinct evidence than has hitherto been available in favour of the reality of the danger of articular and other lesions said to exist in the subjects of oral sepsis. A gouty disposition seems to act as a predisposing cause of the malady, and atmospheric changes and intestinal disorders may excite attacks. Muscular over-exertion also acts as an exciting cause, though gentle exercise is one of the most effective modes of treatment for the developed condition. In the attacks the affected muscles show increased tonus, the foci of inflammation keeping up a condition of irritation clinically evinced in the form of pain and spasm. The occurrence of the lesions of this disease in the muscle of the heart is a possible extension of serious import. That they may so occur is not yet proved, but Dr. James Mackenzie suggests this explanation of certain cases of the disease in which the auricles and ventricles may be found beating at unequal rates, a condition which points to involvement of the conducting bundle of His in some morbid process.

THE THYROID TREATMENT OF DUPUYTREN'S CONTRACTION.

AT a meeting of the Académie de Médecine of Paris on Jan. 14th a new method of treating Dupuytren's contraction of the palmar fascia was described by M. Gilbert. It consists in the administration of thryoid extract, which he has used in 7 cases with 5 favourable results. The following is an example. In March, 1911, a locksmith was seen for bilateral contraction of the palmar fascia which began eight years before in the left hand and five years before in the right. In the right hand there were hard bands, and the third and fourth fingers were flexed on the palm. A similar condition was present in the left hand, but the bands were not so hard or prominent. After the administration of nine doses of 10 centigrammes of thyroid extract the right third and fourth fingers could be stretched, and after the administration of 39 doses the hand had regained all its power. The treatment was discontinued for three months, and there was then a tendency to retrogression. On resuming the treatment rapid improvement took place. After taking 163 doses all stiffness had disappeared. In May, 1912, the patient was working 10 hours daily, and his hands were no longer stiff after work, and the indurated tissue was softening. In June (after taking 216 doses) the tissue was quite supple. In the other four cases a similar result was obtained. The indurated tissues became softened and the function of the hands was regained. In the two cases in which the treatment failed the retraction was very marked and the treatment was continued only for a short time. These results point to a thyroid origin of contraction of the palmar fascia. This view is borne out by the existence in these cases of other symptoms of thyroid deficiency—subacute "rheumatism," pains, headache, alopecia, and œdema, which were also improved by the treatment. In connexion with this view of the pathogenesis of Dupuytren's contraction it is interesting that M. Amat has described the case of a soldier whom he cured with iodine. It is also interesting that a similar beneficial action on other scleroses has been attributed to thyroid extract in some forms of sclerodermia and chronic rheumatism. M. Gilbert's treatment seems worth a trial.

Surgeon-General William May, C.B., has been appointed Medical Director-General of the Navy, in succession to Surgeon-General Sir James Porter, K.C.B.

THE LADY SEDLEY'S RECEIPT BOOK, 1686, AND OTHER SEVENTEENTH CENTURY RECEIPT BOOKS.[1]

BY LEONARD GUTHRIE, M.D. OXON., F.R.C.P. LOND.

THE Lady Sedley's Receipt Book is a MS. quarto volume bound in vellum. The date 1686 appears on the cover, and on the first page is inscribed with elaborate pen-flourishes "The Lady Sedley, Her Receipt Book, 1686." It consists of 75 folios containing 140 recipes, of which 124 are medical and the rest are culinary or cosmetic. The handwriting on the first 58 pages is good and clear, the lines are ruled, and the headings ornamental; every prescription is numbered. Towards the end of the book the prescriptions are in different and more illiterate handwriting, which shows signs of haste or carelessness. There is no index. The book is of some historical interest, for the Lady Sedley, by whom or for whom it was compiled, was the wife of Sir Charles Sedley, wit, writer of plays and sonnets, and boon companion of Charles II. Their only child was the notorious Catherine Sedley, mistress of James II., and created by him in 1686 Countess of Dorchester.

Prescriptions, many of which are endorsed "Probatum est," or "It hath very often been proved," are supplied for major ailments such as dropsy, palsy, renal colic, ague, plague, jaundice (black and yellow), bite by mad dog, poison, small-pox, scurvy, convulsions, gout, consumption, fistula, and rickets. There are also prescriptions for piles, gripes, incontinence of urine, cough, epistaxis, sore breasts and eyes, toothache, tetters (or herpes), "riseing of the lytes" (or "lungs"), headache, constipation, shortness of breath, and "heate of the liver." The "cosmetics" include applications to make hair grow, or to take it away; for the "morphew" or "freckles"; for the cure of "a redd face"; to make the teeth white; and to help a "stinking breath." Several of the recipes are by such eminent physicians as Sydenham, Sir Thomas Witherley, Sir Edward Greaves, Lower, King, Hintent, and Stephens.

Sydenham's prescription is "for the head," and consists of Venice treacle, to the 72 ingredients of which he added wormwood, candied orange peel and angelica, and syrup of candied citrons. The dose was the quantity of a nutmeg washed down with a diuretic draught of horseradish, juniper, and broom. Sir T. Witherley supplies a "Dyett drinke for the Gout," chiefly composed of sarsaparilla, sassafras, hartshorn, ivory, flinty china, red sanders, sage, germander, and balsam of tolu. Richard Lower, the distinguished anatomist, and some say the "ghost" who did work for Thomas Willis, has a receipt for scurvy, containing dock roots, hartstongue, and dandelion infused in small ale. Other remedies for scurvy have in them sea scurvye-grass, watercresses, brooklime, and the best (for scurvy and dropsy) contains the juice of 12 fresh lemons. Dr. King is responsible for a receipt for "the griping of the Gutts": "Take a penny loaf, and slitt it and toast it, and spread it over with Venice Treacle, and dip it in Sack boyled with Cloves, Cinnamon and Nutmegg, tye it up in a cloth and lay it hot to the navel." King, Witherley, and Lower attended Charles II. on his death-bed, and King was the physician who bled His Majesty at the onset of his illness with "extraordinary dexterity, resolution, and presence of mind, or he had certainly died that moment" (Evelyn). The Privy Council voted him £1000 for so doing, which, however, was never paid. Dr. Jacob of Canterbury's medicine for the stone is "15 graines of goat's blood in powder, dranke every morning in Ass's or other Milke."

One recipe is introduced with great parade as "A copy to make the Sov'reignst water that ever was devised by man,

[1] Abstract of a paper read before the Historical Section of the Royal Society of Medicine on March 5th, 1913.

which Dr. Stephens, a physician of great curing and of long experience, did use and therewith did many great cures, and all was kept in secret until a little before his death, when the Archbishopp of Canterbury gat it from him as follows:—Take a gallon of Gascoyn wine, then take ginger, Gallingall Camell, Cinamint, Tollianders, Nutmegs, Cloves, Aniseed of each one dram, then take Sage, Mint, Red Roses, Thyme of the Moor, Pellitory of the wall, Rosemary, wild Marjoram, Pennyroyal, Thyme, Lavender and Avens." All these were to be bruised together and distilled in a limbeck. "The virtues of this water be these: It comforteth the Spiritts Vitall, and preserveth greatly the youth of man, and helpeth the inward diseases coming of cold, and against shaking of the palsey, it cureth the contraction of the sinewes, it helpeth the conception of women that be barren, it killeth wormes in the body, and killeth the cold gout, and helpeth the toothache, it comforteth the stomach very much, it cureth the cold dropsy, it helpeth the stone that is in the bladder, and in the reines of the back, it cureth the canker, it helpeth shortly a stinking breath, and whosoever useth this water ever and anon, and not often, it preserveth him long in good liking, and shall make one seem young a long time." This Dr. Stephens died aged 98, after being bed-ridden for ten years. He was the author of a catalogue of the Oxford Botanical Gardens. It was Archbishop W. Laud (beheaded in 1645) who got the prescription from him, and afterwards presented it to the "Queen's Closet Opened,"[1] and it was subsequently included in "Quincy's Dispensatory" for 1739.

Sir Edward Greaves, the first medical baronet, contributes a receipt for convulsions containing dead man's skull, peonie roots, amber, and bezoar stone. For "giddiness in the head" Dr. Jacob recommends male peonie root and peacock's dung in powder, with nutmeg and black cherry water. We find several prescriptions for rickets, first described by Whistler in 1645, and in 1650 by Glisson in a lengthy treatise. They are "dyett drinkes" containing figs, raisins, currants, various "anti-scorbutics," such as scurvy-grass, licorish, watercress. In one the constituents are to be infused in "faire water," in another the strongest ale and muscadine are employed. Recipes are also culled from non-medical sources. Thus, the Duke of Monmouth and Judge Ellis give remedies for stone, and the Lady Mildmay an "excellent drink for to cure a fistula; but for 'speedy cure' you may tent the wound or sore, and lay thereon a Colworth leaf." Sir Kenelm Digby's "Aqua Mirabilis" finds a place here, and was incorporated in the "Colledge" Dispensatory. It is an infusion of spices in white wine, and was designed to serve as many purposes as even Dr. Stephens's celebrated water.

On the whole, Lady Sedley's recipes are less loathsome than many of those contained in the London Pharmacopœias of the period, for most of them are simple herbal infusions. The excrement and urine of almost every animal were used in medicine, and Willis himself spoke of infusion of fresh horse-dung as "a vulgar but no contemptible remedy in pleurisy and jaundice," and says that fæces of birds and animals owe their value to the volatile salts which they contain. Besides Dr. Jacob's prescription of peacock's dung and peonie for giddiness, Lady Sedley gives infusion of fresh sheep's ordure in Rhenish wine for "black jaundice." Full directions are also supplied for making "Snayle water," distilled from snails and earthworms, and for "Oyle of Swallows," made by pounding in a mortar young swallows just able to fly, boiling them in fresh butter, and straining the result for use in cases of contracture of sinews. Dr. Hintent's preservation against plague consists in forming an issue on the inner side of the left forearm "for the purgeing away from the heart all evil humors which causeth the infection of the Plague." There are several "Plague Waters," all of which contain ginger and some spices which would impart a sensation of warmth to the epigastrium, and thus inspire persons in dread of contagion with faith in the efficacy of the remedy. For small-pox several posset drinks are prescribed with the direction, "Give no medicine when they break otherwise than to wash the eyes and throat with Rose water."

[1] So stated in the index of authorities in the "Queen's Closet Opened." But as Laud was beheaded in 1645 it follows that either the compiler of the index made a mistake, or that Lady Sedley was incorrect in saying that Stephens divulged his secret to the Archbishop "a little before his death."

Other MS. Receipt Books of the Seventeenth Century.

The Lady Sedley was not singular in compiling her "Receipt Book." Probably many such are hidden away in the libraries of old country houses. Several interesting examples of the kind are in the MS. department of the British Museum. The most important of these are by Mary Doggett and Lady Ranelagh. "Mary Doggett, Her Book of Receipts," 1682 (Sloane 27,466), large 4to, folios 307, is beautifully written and contains both medicinal and culinary recipes. A MS. note on the first page states that "this Mary Doggett was the wife of Doggett the Player, who left a legacy of a yearly coat and badge to be rowed for." The competition for Doggett's coat and badge by Thames watermen still takes place in August annually, and was inaugurated by Thomas Doggett in 1716.

"The Lady Ranelagh's Choice Receipts, as also Some of Captain Willis's who Valued them above Gold" (Sloane 1367), is a long narrow volume containing 83 folios and 292 recipes. The handwriting is small and cramped, but legible. Like the others, it contains medical, culinary, and cosmetic preparations. At the end there are alphabetical lists of herbs and their virtues, an index to recipes, and also a list of symbols for different drugs, and of "our own abbreviations." The book is undated, but was probably written between 1670 and 1680. Lady Ranelagh was a daughter of the Earl of Cork, sister of Robert Boyle, and of Mary Countess of Warwick. Of Lady Warwick (1625–1678) we are told in a funeral sermon by her chaplain, Dr. Walker, that "if any were sick or tempted, or in any distress of body or mind," they would go to "the good Countess whose closet or still house was their shop for Chirurgerie and Physick." Elizabeth Walker (*née* Sadller), the wife of Dr. Walker, chaplain to the Warwicks, "had a competent measure of knowledge both in physick and chirurgerie," partly obtained from her brother-in-law, "a very able doctor of the London College; and also from her studies of Riverius, Culpepper, and Bonettus." She had "good store of vomits, purges, sudorifics, cordials, pectorals; almost every kind of syrups, strong and simple distilled waters, several quarts of which she left (yea, gallons of which she used most) which it is a pity should be lost" ("Holy Life of Mrs. El. Walker," by Anthony Walker, 1690). Probably these three learned ladies collaborated in producing "Lady Ranelagh's Book of Receipts."

Another MS. (Sloane 556) is "A Booke of Medicens collected, being most of them proved Medicins to healp, written by Mr. Anthony Lewis the 20th day of January 1696 out of a booke which was the La. Marquies Dorsetts." It includes medicine, cookery, and farriery. Anne, daughter of the Earl of Cumberland, married first Richard, Earl of Dorset, and secondly Philip, Earl of Pembroke in 1675. A portrait painted of her during widowhood provides her with two recipe books, and another, painted when she was 13, contains a large assortment of learned volumes. In "Home Life of English Ladies in the 17th Century" (1861) there are many examples of noble ladies who spent most of their time in practising medicine and surgery on their poorer neighbours. Marvellous were the cures of the Countess of Arundel (1557–1630). She turned her house into a hospital, and received patients from places distant 30 or 40 miles. "In some years three score dozen sheepskins were spent merely in making the plaisters she gave, and above 1 cwt. of one matter only, whereof some were made" ("Life of the Hon. Lady Anne Countess of Arundel," by H. G. F. Howard (Duke of Norfolk), 1857, p. 213). Lady Maynard, according to Bishop Ken, who preached her funeral sermon in 1684, "was a common patroness to the poor and needy, and a common physician to her sick neighbours." From Lady Anne Halkett's Autobiography (Camden Society, 1875), 1622–1699, we learn that she was addicted to medical pursuits, and so also were Lady Vere of Kirby Hall and many others of the same period.

It is highly probable that these aristocratic amateurs in medicine were not altogether popular with the faculty, and this accounts for Sydenham's rather ungracious remark: "Nowadays every house has its old woman a practitioner in an art which she never learnt, to the killing of mankind." Dr. Walter Harris also complained of "the cordials which her Ladyship exhibits promiscuously in every disease with very great applause, for be the event what it will, the cordial to be sure must never be blamed" ("De morbis acutis infantum," 1689).

Printed Receipt Books of the Seventeenth Century.

Many of the recipes coaxed or stolen from physicians, or handed down for generations from one to another, found their way into print in the seventeenth century. The first of these is by Elizabeth Grey, Countess of Kent, 1581–1651. It is entitled "A choice Manual of rare and select Secrets in Physick and Chyrurgerie, collected and practised by the Countess of Kent (lately dec'd)." Although this book went through 19 editions it appears to be rare, for no copies are to be found in our London medical libraries. The earliest in the British Museum is the second edition, edited by W. Jar in 1653.

"The Ladies Cabinet Enlarged and Opened, containing Many rare Secrets and Rich Ornaments of several kinds and different Uses, Compiled under three general heads:—(1) Preserving, Conserving, Candying, etc., (2) Physick and Chyrurgery, (3) Cookery and Housewifery, whereunto added Sundry experiments and Choice Extractions of Waters, Oyles, etc. Collected and practised by The late Right Honourable and learned Chymist The Lord Ruthven," is a pretty little 12mo book, the second edition of which was published in 1655. It therefore precedes the "Queen's Closet Opened," which Dr. Oxford tells me was first published in 1657. "The Queen's Closet Opened. Being Incomparable secrets in Physick, Chyrurgery, Preserving, Candying, etc., which were presented to the Queen by the most experienced Persons of the times, many whereof were had in esteem when she pleased to descend to private Recreations" is divided into three parts: (1) "The Pearl of Practice," (2) "The Queen's Delight," (3) "The Compleat Cook." A table of authorities gives the names of 25 physicians, several surgeons, an oculist, and a large number of Royal and titled persons who contributed medicinal and other recipes.

"The Ladies Dispensatory, Containing the Nature, Virtues, and Qualities of all Herbs and Simples usefull in Physick, reduced into a Methodicall Order, for their more ready use in any Sicknesse, or other accident of the Body, the like never published in English," is by Leonard Sowerby, and was published in 1652. The author says in his preface that it is based on the works of Dioscorides, Gerard, Goræus and Fuchsius. At the end there is an alphabetical index or "Table of the Virtues of the Simples contained in this Booke." It is comprehensive, for it contains remedies suitable for the treatment of "The Bitings of Shrew Mice," "The Bitings of Crocodiles, and Cockatrices," "The Venomes of Toades and greene Froggs," and of other reptiles and noxious insects.

It is evident from the existence of these popular "Receipt Books" that anyone who chose to collect a sufficient number of "formulas" was considered fully equipped for the treatment of diseases of all kinds. And if like Sydenham and Harris we are inclined to cavil at the claims of noble ladies to "practise an art which they had never learnt, to the killing of mankind," we must nevertheless remember the woeful plight of therapeutics at the time. The simple herbal remedies of the Lady Sedley and her like were harmless in themselves, and not a whit less based on ignorance and gross superstition than many which they prized as bearing the stamp of highest medical authority.

Historical Details.

A few more details regarding the Sedley family may not be out of place. Samuel Pepys makes many uncomplimentary allusions to Sir Charles Sedley's mad pranks and dissolute behaviour. In 1663 Sedley, Lord Buckhurst, and Sir Thomas Ogle got drunk at the "Cock" in Bow-street, and caused a riot by their grossly indecent conduct, for which Sedley was fined £500. In 1668 he and Lord Buckhurst again scandalised everybody by running about the Strand "sans culottes." On this occasion the King took their part, and Pepys feared that the Lord Chief Justice Keeling would "lay the constable by the heels" for daring to arrest these fine gentlemen. Again, in October, 1668, Pepys alleges that the King, Sedley, and Buckhurst were all drunk together at Saxham. Pepys, however, admits that with all his faults Sedley was a "mighty witty man." According to his biographer, "the King would never part with Sedley, so he never would part with the King," although "his estate was never the better for the Court," and "his morals much the worse." Charles II. liked him because he never asked him for anything, and also "singled him out for the best genius of the age, and frequently told his familiars that Sedley's style either in writing or discourse would be the standard of the English language." His published works hardly bear out Charles's estimate of them, but he is still remembered as the author of the charming sonnet, "Phyllis is My Only Joy." His verses are neat, simple in diction, and not quite so coarse as those of Rochester, Buckingham, and in places even Cowley. Rochester summed them up appropriately enough as "mannerly obscene." His plays, of which "Bellamira" or "The Mistress" has been accounted the best, are both tedious and licentious.

In 1680 Sedley met with an accident thus recorded in the "Hatton Correspondence" (Camden Society, Vol. I., p. 216): "Jan. 15, 1679–80. Yesterday ye roof of ye Tennis Cote in ye Haymarket fell down. Sr Charles Sidley being there had his skull broke, and it is thought it will be mortall." It may have been partly on account of this accident, or for domestic reasons, that Sedley withdrew as much as possible from London after the death of Charles II., but he did not retire from political life. Several of his speeches in Parliament as Member for New Romney are included in his printed works. A passage from the last of these, delivered in 1699 during a debate on "a Bill for disbanding the Army," will bear quotation. It ends: "If we are true to ourselves 10,000 men are enough; and if not, 100,000 men are too few." He died in 1701.

Catherine Sedley, daughter of Sir Charles and the Lady Sedley, was born in 1657. Evelyn described her as "none of the most virtuous but a witt." She was pale, squinted, and was otherwise so plain that Charles II. said that he supposed she was prescribed to his brother James by his confessor as a sort of penance. However, she seems to have exercised a singular fascination over James, and the Protestants made use of the *liaison* for political reasons. The climax was reached when she was created Baroness Darlington and Countess of Dorchester, with an income of £5000 a year, on Jan. 19th, 1686. This was a deadly insult to the Catholics, and Queen Mary was so furious that she went on "hunger strike" for two days. James only succeeded in persuading her to take food by scourging himself in her presence. The Queen kept the scourge, but the Countess eventually got the money. She was, however, ordered to withdraw from Whitehall and advised to pay a visit to Flanders. She objected to Flanders on the ground that the "number of Convents there would render the air too oppressive," and went to Ireland instead. But not liking Dublin, she returned to London in August, 1686. James immediately fluttered back to her side, but the reunion did not last long. Her political influence was gone, and her income for the time remained unpaid. Her father does not seem to have been on good terms with his august "son-in-law." He was instrumental in procuring the accession of William and Mary, and remarked afterwards that he and James were even, for "if he has made my daughter a Countess, I have helped to make his daughter a Queen." In return for Sedley's good offices the countess received a grant of £1500 a year from William and Mary in May, 1691, and in 1703 her original pension of £5000 a year was renewed by a grant of the Irish Parliament. She married Sir David Colyear (afterwards Earl Colyear) in 1696, became pious, it is said, and died at Bath in 1717.

Of the Lady Sedley herself, we have little information beyond that which may be inferred from the "Receipt Book" which she compiled. There is a note, however, concerning her in Burnet's "History of My Own Times" (Vol. III., p. 114) which is of interest. Referring to her daughter, Lady Dorchester, the editor "D" writes: "The best excuse that could be made for her was that her mother Lady Catherine Sedley had been locked up in a madhouse many years before she died." But it is clear that she must have been in full possession of her senses in the year 1686, when her book was commenced. As we have seen, the year 1686 marked an important epoch in the lives of the Sedley family, for it coincided with the retirement of Sedley from the Court, and with the social ostracism of the Lady Dorchester. The inception of her book suggests that poor Lady Sedley was prepared to welcome the return of her wayward husband and erring daughter to the family fold at Southfleet. Surely, her famous "Cordialls" and "wound waters," her cures for ailments of the head, stomach, liver, and kidneys, were designed to patch up the damaged constitution of the one,

whilst her face washes, unguents, and cosmetics might serve to impart to the other some of the loveliness which Nature had denied her. Moreover, in order to keep her wanderers to her side, she must feed them well, and hence her excellent recipes for table delicacies. Such reflections lead us to attach a faint tinge of romance to the faded pages of "The Lady Sedley's Receipt Book."

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THE Bill which the Government hopes to see placed upon the statute book as the Mental Deficiency Act, 1913, has the advantage over its predecessor of having had its subject matter discussed and defined by the House of Commons during last session, and of having had eliminated from it features which were likely to secure for it considerable opposition. For example, it makes no reference to the undesirability of procreation of children by the mentally defective, and the passage which in the former Bill sought to make penal marriage with a defective person, knowing that person to be defective, and also to penalise anyone knowingly solemnising or bringing about such a marriage, has gone. The omissions will be received with mixed feelings even by those who allow their convenience.

Defining Clauses.

The various changes made in the original Bill in committee have been noticed from time to time in THE LANCET, but it will be useful to quote in full the two defining clauses which are now found at the beginning instead of towards the middle of the proposed measure. It will be observed that certain persons, under Clause 1, are to be regarded as mentally defective within the meaning of the Act—this definition was given in our Parliamentary Intelligence last week—but such persons are only to come under the authority of the Act on the fulfilment of conditions prescribed by Clause 2:—

1.—The following classes of persons who are mentally defective shall be deemed to be defectives within the meaning of this Act—
- (*a*) Idiots; that is to say, persons so deeply defective in mind from birth or from an early age as to be unable to guard themselves against common physical dangers;
- (*b*) Imbeciles; that is to say, persons in whose case there exists from birth or from an early age mental defectiveness not amounting to idiocy, yet so pronounced that they are incapable of managing themselves or their affairs, or, in the case of children, of being taught to do so;
- (*c*) Feeble-minded persons; that is to say, persons in whose case there exists from birth or from an early age mental defectiveness not amounting to imbecility, yet so pronounced that they require care, supervision, and control for their own protection or for the protection of others, or, in the case of children, are incapable of receiving proper benefit from the instruction in ordinary schools;
- (*d*) Moral imbeciles; that is to say, persons who from an early age display some permanent mental defect coupled with strong vicious or criminal propensities on which punishment has little or no deterrent effect.

2.—(1) A person who is a defective may be deal with under this Act by being sent to or placed in an institution for defectives or placed under guardianship—
- (*a*) at the instance of his parent or guardian, if he is an idiot or imbecile or is under the age of 21; or
- (*b*) if in addition to being a defective he is a person—
  - (i.) who is found neglected, abandoned, or cruelly treated; or
  - (ii.) who is found guilty of any offence, or who is ordered or liable to be ordered to be sent to a certified industrial school;
  - (iii.) who is undergoing imprisonment (except imprisonment under civil process), or penal servitude, or is undergoing detention in a place of detention by order of a court, or in a reformatory or industrial school, or in an inebriate reformatory or who is detained in an institution for lunatics or a criminal lunatic asylum; or
  - (iv.) who is an habitual drunkard within the meaning of the Inebriates Acts, 1879 to 1900; or
  - (v.) in whose case such notice has been given by the local education authority as is herein-after in this section mentioned; or
  - (vi.) who is in receipt of poor relief at the time of giving birth to an illegitimate child or when pregnant of such child.

Part 2 of Clause 2 further provides for notice being given to the local authority by the local education authority with regard to defective children over the age of 5 years who are incapable of receiving benefit from special instruction, and with regard to children too old to remain at school and needing to be placed in institutions or under guardianship.

Manner of Dealing with Defectives.

The rest of Part I. gives power to deal with defectives in the following manner, and provides the necessary legal machinery for their protection. The parent or guardian of a defective who is an idiot or imbecile or under the age of 21 years may place him in an institution or under guardianship, subject to a certificate in prescribed form from a medical practitioner. A defective subject to the Act may at the instance of one not his parent or guardian be dealt with (*a*) under an order made by a judicial authority on a petition; (*b*) under an order of the court if found guilty of an offence or liable to be sent to an industrial school; (*c*) under an order of the Home Secretary in the case of a defective detained in a prison, criminal lunatic asylum, reformatory or industrial school, place of detention, or inebriate reformatory. A petition seeking an order from a judicial authority in respect of a defective must be accompanied by two medical certificates or by a certificate that a medical examination was impracticable, and by a statutory declaration setting out certain prescribed particulars. The effect and duration of detention orders and of detention not under orders are dealt with in Clauses 10–12.

It may be noted that in Clause 8, which lays down the procedure in cases of defectives guilty of offences, it is provided that when prisoners apparently defective are charged with offences, the police are assigned the duty of communicating with the local authority and of bringing evidence as to the prisoner's mental condition before the court. Provision is also made for the transfer of defectives undergoing imprisonment, or otherwise under unsuitable treatment, to institutions for defectives. By Clause 14 provision is made for taking to a place of safety any person believed to be defective and not properly taken care of, and in cases of suspected neglect or cruelty, a magistrate's warrant may be obtained enabling a constable to make a search and to [illegible] forcible entry, if necessary, into a house and remove the defective person. In these circumstances the case is to be accompanied by the medical officer of the local authority or by some other medical practitioner. Transfers from institutions for defectives to institutions for criminals and *vice versâ* are duly provided for.

Constitution of Central and Local Authorities.

The central and local authorities for the administration of the Act are dealt with in Part II., Sections 1[illegible]. The central authority is to be known as the Board of Control, and is to consist of not more than 15 commissioners, not more than 12 of whom are to be paid, and of the paid commissioners four are to be legal and four medical commissioners, in each case of not less than five years' professional standing. One paid and one unpaid commissioners are to be women. The Lord Chancellor is to appoint the legal commissioners after consultation with the Home Secretary, and the latter gentleman, after consultation with the Lord Chancellor, is to appoint the others. The existing Commissioners in Lunacy are *ex officio* to be members of the Board of Control when the Act comes into force, and the Board is to superintend the supervision, protection, and control of defectives, powers exercisable with respect to lunatics by the Chancellor, Lunacy Commissioners, judge or masters in lunacy, and others, continuing to be so exercised by them except where it is expressly provided otherwise by the Mental Deficiency Act. Express provision thus referred to is to be found in Clause 59, which provides that "all the powers and duties of the Commissioners in Lunacy under the Lunacy Acts 1890 to 1911 shall as from the commencement of this Act be transferred to the Board, and His Majesty may by Order in Council direct that anything which under those Acts is required or authorised to be done by, to, or in respect of, any one or more Commissioners in Lunacy or any officer of those commissioners, shall be done by, to, or in respect of one or more commissioners under this Act or the corresponding officer of the Board. Provided that nothing in such Order in Council shall authorise anything by those acts required to be done by two commissioners, one a medical commissioner and the other a legal commissioner, to be done otherwise than by two commissioners so qualified." The powers and duties of the Commissioners of the Board of Control are defined, and include the supervision, inspection, and visiting necessary to make the Act effective, and the maintenance by the Board of institutions for defectives of criminal, dangerous, or violent propensities. The local authorities for the purposes of the Act are to be, by Clause 25, the county and borough councils for

counties and county boroughs respectively, and every local authority is to constitute a committee for the care of the mentally defective, consisting of members of the council and other persons having the requisite knowledge and experience. The general powers of the local authorities include the ascertaining who within their area are defectives or subject to be dealt with under the Act, and to provide for them suitable supervision, or to secure their being sent to institutions or placed under guardianship, power being given to make provision for guardianship or to maintain the defective person wholly or partly in an institution.

Clause 29 defines the duties of the local education authority under the Act with regard to defective children, and to the information to be given to the local authority with regard to them.

Provision of Institutions, Penalties, &c.

Part III. of the Bill, dealing with "the Supervision and Provision of Institutions, &c.," shows that the following classes of institutions are contemplated and provided for: "State institutions," established by the Board for those of criminal, dangerous, or violent propensities; "certified institutions," being institutions maintained for the care and treatment of defectives subject to certification and supervision by the Board, in which are included "approved buildings," provided by boards of guardians for those under their charge; "certified houses," kept by persons receiving defectives for their private profit; "approved homes," which may be instituted by the managers of any institution for defectives supported wholly or partly by voluntary contributions, or by persons receiving defectives for profit. ...tive persons who are maintained in certified houses ... receive any contribution to their expenses from ...vided by Parliament or from local authorities, ...d homes will not be for any person sent to ... by judicial order, or by a court, or by the ... Local authorities, subject to the approval ... of State, may establish or contribute to ...ontract with managers of certified institu... ...ption and maintenance of persons for whom ... by the Act to make provision. The Home ...powered to make regulations as to the ...ficates to institutions for their organisation ...t and for other matters affecting the recep..., and welfare of their inmates.

... the Bill provides the necessary penalties for ...ns of the Act and for offences with respect ...ception, detention, and general treatment of de... Except in such institutions or places as have ...en mentioned no one may undertake the care of more than one defective, and where such care of one defective is undertaken notice must be given. It will be a misdemeanour for any manager of an institution, owner of a certified house, or guardian of a defective, to detain him or exercise powers over him conferred by the Act after he has knowledge that those powers have expired. Among other matters, it may be mentioned that suitable provisions are made to prevent the supply of intoxicants to defectives who are being cared for under the Act, to punish ill-treatment of them, and the abuse of females. Offences under the Act may be punished by fine or imprisonment not exceeding two years, or upon summary prosecution by three months' imprisonment, or by fine not exceeding £50.

Due provision is made for the transfer of the staff of the Lunacy Commissioners to the Board of Control, for financial and for other matters. Among definitions it may be noted that "relative means a lineal ancestor or lineal descendant of an ancestor not more remote than great-grandfather or great-grandmother." The Bill does not extend to Scotland or Ireland, and is designed to come into force on Jan. 1st, 1914. It is, however, obviously a measure which will take some time, possibly some years, to become fully effective. We comment upon some of its principle features in a leading article this week.

ROYAL NATIONAL HOSPITAL FOR CONSUMPTION, VENTNOR, ISLE OF WIGHT.—The annual general meeting of governors of this hospital will be held at the Whitehall Rooms, Hotel Metropole, London, S.W., on Thursday, April 24th, at 3 P.M., when matters of importance to the institution will be considered.

ANNUAL REPORT OF THE LONDON COUNTY COUNCIL FOR 1911.

IN THE LANCET of March 15th the appearance was announced of Volume III. of this report, which relates to matters of public health.[1] In a preliminary article of that date we reviewed Chapter XXXII., which deals, *inter alia*, with the Vital Statistics of London for 1911, compiled by Dr. W. H. Hamer, the county medical officer of health. In the present article we deal with Chapter XXXIV., which includes the report for 1911 of Dr. James Kerr. In presenting this report the Education Committee point out that in July, 1911, the Council decided to place under the control of the county medical officer of health the medical work of the Education Department. From the circumstance that Dr. Hamer did not enter upon his duties as county medical officer of health until the beginning of 1912 it follows that for the views expressed by Dr. Kerr on the medical work of his department in 1911 he alone must be held responsible.

Report of the Medical Officer (Education) for 1911.

Dr. Kerr's report is an elaborate and comprehensive document of 78 pages. It abounds with matter of consummate importance to the rising generation of Londoners. In all probability some of the writer's conclusions will fail to obtain universal approval; nevertheless, they are deserving of respect, as the product of his long and unique experience. For the latter reason we believe that the report will be studied with advantage by the large body of school medical officers newly appointed throughout the country.

"With this report," says Dr. Kerr, "the series for which I have been responsible during the last ten years is concluded. An attempt has been made to lay the foundations of school hygiene as a study of national interest and value on the basis of problems worked out on scientific lines by the staff of the department." Adverting to the circumstance that from the close of 1911 all arrangements for medical treatment have been transferred from the education officer to the medical officer of health, Dr. Kerr acknowledges that the change can be justified, if it is regarded as a first step to the coördination, under one authority, of the sanitary service of the metropolis. Dr. Kerr is careful to insist that, in matters of school hygiene, existing knowledge is still far ahead of practice. He expresses the conviction that under present-day conditions schools play only a minor part in the dissemination of the more familiar infectious maladies, and on that account urges what he considers the superior claims of sanitation in the home. The stuffy conditions of dwelling rooms and the scarcity of playgrounds he regards as answerable for the excessive prevalence among children of adenoids, as well as of anæmia and debility. Observing that school hygiene has already passed beyond school limits, in the wide outlook derived from the study of children there, he rightly declares it a matter of urgent national importance that, in addition to better food and improved opportunities for cleanliness, greater space for living and recreation purposes should be provided for children of school age. Particularly instructive to medical officers newly undertaking school work are the sections on medical inspection and treatment, which are ably written, and will repay attentive study.

Medical Inspection of School Children.

It appears that of the 204,000 children, in round numbers, who were medically examined in London during 1911, more than half showed defects of various kinds, and that of these two-thirds were recommended for treatment. One-third of the children were the subjects of enlarged tonsils or adenoids, and four-fifths of dental caries. Between two and three thousand cases of ringworm came under observation during the year. The returns of re-inspections of children recommended for treatment show that out of 32,000 who had received treatment 19,000 had been satisfactorily treated, 4000 unsatisfactorily treated, and that about 8000 were still under treatment. Since 1908 medical inspection has been carried out in all the secondary schools, training colleges, and technical schools of the Council. The students are

[1] This volume includes (1) the Report of the County Medical Officer of Health; (2) the Report of the Education Medical Officer; (3) the Report on the Housing of the Working Classes Act. Foolscap folio, pp. 193 and lxviii. King and Son. Price 2s. 6d.

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Part 2 of Clause 2 further provides for notice being given to the local authority by the local education authority with regard to defective children over the age of 5 years who are incapable of receiving benefit from special instruction, and with regard to children too old to remain at school and needing to be placed in institutions or under guardianship.

Manner of Dealing with Defectives.

The rest of Part I. gives power to deal with defectives in the following manner, and provides the necessary legal machinery for their protection. The parent or guardian of a defective who is an idiot or imbecile or under the age of 21 years may place him in an institution or under guardianship, subject to a certificate in prescribed form from a medical practitioner. A defective subject to the Act may at the instance of one not his parent or guardian be dealt with (*a*) under an order made by a judicial authority on a petition; (*b*) under an order of the court if found guilty of an offence or liable to be sent to an industrial school; (*c*) under an order of the Home Secretary in the case of a defective detained in a prison, criminal lunatic asylum, reformatory or industrial school, place of detention, or inebriate reformatory. A petition seeking an order from a judicial authority in respect of a defective must be accompanied by two medical certificates or by a certificate that a medical examination was impracticable, and by a statutory declaration setting out certain prescribed particulars. The effect and duration of detention orders and of detention not under orders are dealt with in Clauses 10–12.

It may be noted that in Clause 8, which lays down the procedure in cases of defectives guilty of offences, it is provided that when prisoners apparently defective are charged with offences, the police are assigned the duty of communicating with the local authority and of bringing evidence as to the prisoner's mental condition before the court. Provision is also made for the transfer of defectives undergoing imprisonment, or otherwise under unsuitable treatment, to institutions for defectives. By Clause 14 provision is made for taking to a place of safety any person believed to be defective and not properly taken care of, and in cases of suspected neglect or cruelty, a magistrate's warrant may be obtained enabling a constable to make a search and to obtain forcible entry, if necessary, into a house and remove the defective person. In these circumstances the constable is to be accompanied by the medical officer of the local authority or by some other medical practitioner. Transfers from institutions for defectives to institutions for lunatics and *vice versâ* are duly provided for.

Constitution of Central and Local Authorities.

The central and local authorities for the administration of the Act are dealt with in Part II., Sections 19–32. The central authority is to be known as the Board of Control, and is to consist of not more than 15 commissioners, not more than 12 of whom are to be paid, and of the paid commissioners four are to be legal and four medical commissioners, in each case of not less than five years' professional standing. One paid and one unpaid commissioners are to be women. The Lord Chancellor is to appoint the legal commissioners after consultation with the Home Secretary, and the latter gentleman, after consultation with the Lord Chancellor, is to appoint the others. The existing Commissioners in Lunacy are *ex officio* to be members of the Board of Control when the Act comes into force, and the Board is to superintend the supervision, protection, and control of defectives, powers exercisable with respect to lunatics by the Chancellor, Lunacy Commissioners, judge or masters in lunacy, and others, continuing to be so exercised by them except where it is expressly provided otherwise by the Mental Deficiency Act. Express provision thus referred to is to be found in Clause 59, which provides that "all the powers and duties of the Commissioners in Lunacy under the Lunacy Acts 1890 to 1911 shall as from the commencement of this Act be transferred to the Board, and His Majesty may by Order in Council direct that anything which under those Acts is required or authorised to be done by, to, or in respect of, any one or more Commissioners in Lunacy or any officer of those commissioners, shall be done by, to, or in respect of one or more commissioners under this Act or the corresponding officer of the Board. Provided that nothing in such Order in Council shall authorise anything by those acts required to be done by two commissioners, one a medical commissioner and the other a legal commissioner, to be done otherwise than by two commissioners so qualified." The powers and duties of the Commissioners of the Board of Control are defined, and include the supervision, inspection, and visiting necessary to make the Act effective, and the maintenance by the Board of institutions for defectives of criminal, dangerous, or violent propensities. The local authorities for the purposes of the Act are to be, by Clause 25, the county and borough councils for

counties and county boroughs respectively, and every local authority is to constitute a committee for the care of the mentally defective, consisting of members of the council and other persons having the requisite knowledge and experience. The general powers of the local authorities include the ascertaining who within their area are defectives or subject to be dealt with under the Act, and to provide for them suitable supervision, or to secure their being sent to institutions or placed under guardianship, power being given to make provision for guardianship or to maintain the defective person wholly or partly in an institution.

Clause 29 defines the duties of the local education authority under the Act with regard to defective children, and to the information to be given to the local authority with regard to them.

Provision of Institutions, Penalties, &c.

Part III. of the Bill, dealing with "the Supervision and Provision of Institutions, &c.," shows that the following classes of institutions are contemplated and provided for: "State institutions," established by the Board for those of criminal, dangerous, or violent propensities; "certified institutions," being institutions maintained for the care and treatment of defectives subject to certification and supervision by the Board, in which are included "approved buildings," provided by boards of guardians for those under their charge; "certified houses," kept by persons receiving defectives for their private profit; "approved homes," which may be instituted by the managers of any institution for defectives supported wholly or partly by voluntary contributions, or by persons receiving defectives for profit. Defective persons who are maintained in certified houses will not receive any contribution to their expenses from money provided by Parliament or from local authorities, and approved homes will not be for any person sent to an institution by judicial order, or by a court, or by the Home Secretary. Local authorities, subject to the approval of the Secretary of State, may establish or contribute to institutions, or contract with managers of certified institutions, for the reception and maintenance of persons for whom they are required by the Act to make provision. The Home Secretary is empowered to make regulations as to the granting of certificates to institutions for their organisation and management and for other matters affecting the reception, discharge, and welfare of their inmates.

Part IV. of the Bill provides the necessary penalties for infringements of the Act and for offences with respect to the reception, detention, and general treatment of defectives. Except in such institutions or places as have been mentioned no one may undertake the care of more than one defective, and where such care of one defective is undertaken notice must be given. It will be a misdemeanour for any manager of an institution, owner of a certified house, or guardian of a defective, to detain him or exercise powers over him conferred by the Act after he has knowledge that those powers have expired. Among other matters, it may be mentioned that suitable provisions are made to prevent the supply of intoxicants to defectives who are being cared for under the Act, to punish ill-treatment of them, and the abuse of females. Offences under the Act may be punished by fine or imprisonment not exceeding two years, or upon summary prosecution by three months' imprisonment, or by fine not exceeding £50.

Due provision is made for the transfer of the staff of the Lunacy Commissioners to the Board of Control, for financial and for other matters. Among definitions it may be noted that "relative means a lineal ancestor or lineal descendant of an ancestor not more remote than great-grandfather or great-grandmother." The Bill does not extend to Scotland or Ireland, and is designed to come into force on Jan. 1st, 1914. It is, however, obviously a measure which will take some time, possibly some years, to become fully effective. We comment upon some of its principle features in a leading article this week.

ROYAL NATIONAL HOSPITAL FOR CONSUMPTION, VENTNOR, ISLE OF WIGHT.—The annual general meeting of governors of this hospital will be held at the Whitehall Rooms, Hotel Metropole, London, S.W., on Thursday, April 24th, at 3 P.M., when matters of importance to the institution will be considered.

ANNUAL REPORT OF THE LONDON COUNTY COUNCIL FOR 1911.

IN THE LANCET of March 15th the appearance was announced of Volume III. of this report, which relates to matters of public health.[1] In a preliminary article of that date we reviewed Chapter XXXII., which deals, *inter alia*, with the Vital Statistics of London for 1911, compiled by Dr. W. H. Hamer, the county medical officer of health. In the present article we deal with Chapter XXXIV., which includes the report for 1911 of Dr. James Kerr. In presenting this report the Education Committee point out that in July, 1911, the Council decided to place under the control of the county medical officer of health the medical work of the Education Department. From the circumstance that Dr. Hamer did not enter upon his duties as county medical officer of health until the beginning of 1912 it follows that for the views expressed by Dr. Kerr on the medical work of his department in 1911 he alone must be held responsible.

Report of the Medical Officer (Education) for 1911.

Dr. Kerr's report is an elaborate and comprehensive document of 78 pages. It abounds with matter of consummate importance to the rising generation of Londoners. In all probability some of the writer's conclusions will fail to obtain universal approval; nevertheless, they are deserving of respect, as the product of his long and unique experience. For the latter reason we believe that the report will be studied with advantage by the large body of school medical officers newly appointed throughout the country.

"With this report," says Dr. Kerr, "the series for which I have been responsible during the last ten years is concluded. An attempt has been made to lay the foundations of school hygiene as a study of national interest and value on the basis of problems worked out on scientific lines by the staff of the department." Adverting to the circumstance that from the close of 1911 all arrangements for medical treatment have been transferred from the education officer to the medical officer of health, Dr. Kerr acknowledges that the change can be justified, if it is regarded as a first step to the coördination, under one authority, of the sanitary service of the metropolis. Dr. Kerr is careful to insist that, in matters of school hygiene, existing knowledge is still far ahead of practice. He expresses the conviction that under present-day conditions schools play only a minor part in the dissemination of the more familiar infectious maladies, and on that account urges what he considers the superior claims of sanitation in the home. The stuffy conditions of dwelling rooms and the scarcity of playgrounds he regards as answerable for the excessive prevalence among children of adenoids, as well as of anæmia and debility. Observing that school hygiene has already passed beyond school limits, in the wide outlook derived from the study of children there, he rightly declares it a matter of urgent national importance that, in addition to better food and improved opportunities for cleanliness, greater space for living and recreation purposes should be provided for children of school age. Particularly instructive to medical officers newly undertaking school work are the sections on medical inspection and treatment, which are ably written, and will repay attentive study.

Medical Inspection of School Children.

It appears that of the 204,000 children, in round numbers, who were medically examined in London during 1911, more than half showed defects of various kinds, and that of these two-thirds were recommended for treatment. One-third of the children were the subjects of enlarged tonsils or adenoids, and four-fifths of dental caries. Between two and three thousand cases of ringworm came under observation during the year. The returns of re-inspections of children recommended for treatment show that out of 32,000 who had received treatment 19,000 had been satisfactorily treated, 4000 unsatisfactorily treated, and that about 8000 were still under treatment. Since 1908 medical inspection has been carried out in all the secondary schools, training colleges, and technical schools of the Council. The students are

[1] This volume includes (1) the Report of the County Medical Officer of Health; (2) the Report of the Education Medical Officer; (3) the Report on the Housing of the Working Classes Act. Foolscap folio, pp. 193 and lxviii. King and Son. Price 2s. 6d.

continuously under observation; and in case of illness they are debarred from further residence in the institution. Medical inspection is now regarded as an indispensable and generally acceptable detail of school routine. The masters and mistresses for the most part show keenness and promptitude in obtaining treatment of ailments noted at the medical examinations, and the parents willingly respond to their efforts. Compared with the previous year, the defects found in 1911 show a considerable decrease, the physique of many previously defective children having materially improved.

Recent experience once more emphasises the contention that good nutrition is essential if the best value is to be derived from tuition. Many of the boys in the "trade schools" improve remarkably under the combination of physical and mental training, but a few of them who come from very poor homes and are insufficiently fed fail to derive benefit. A boy of first-class ability may learn so easily as to get on in spite of a third-class physique. A boy of first-class physique will not be harmed by the endeavour to push on his third-class wits, but a boy of rather poor physique and average intellect will suffer from the strain, as also will those boys who are insufficiently nourished and cared for.

As regards prophylaxis, Dr. Kerr regards the inculcation of habits of cleanliness as a material function of school work. When the want of reasonable opportunities for cleansing is properly appreciated school baths will probably be insisted on as part of the prophylaxis against the lymphatic debility that shows itself ultimately in the shape of adenoids or perhaps of tuberculosis. The reserve powers of children require cultivation. The necessity for free exercise and fresh air proves the want of playgrounds more spacious than those now attached to the schools. If town-bred children are to maintain normal health they must be enticed into playgrounds, and houses will have to be demolished in order to provide the necessary ground-space. Reaction to unhealthy environment is shown by the fact that 30 per cent. of the school children are sufferers from adenoids. Many of these need surgical operations; but, in circumstances existing among school children, even this is unsatisfactory in about two-thirds of the cases. Rational treatment, by preventing ill-health indicated by these symptoms, would involve the use of all means to prevent catarrhal attacks, and to raise the reserve powers of children. Among the chief causes of catarrh in early life are ignorance and dirt. Sufficient air space is the principal need—house room and all that it connotes; school room; free spaces of land for ventilation; opportunity for recreation; the provision of baths and other means of cleanliness. Few people will differ with Dr. Kerr in the opinion that the expenditure of public money on the health of children is of greater national importance than its expenditure on the health of adults.

Medical Treatment of School Children: Enlarged Tonsils and Adenoids.

The treatment of children whose educational efficiency is damaged by dirt, parasites, diseases of the ears, adenoids, or impaired eyesight was begun in London about ten years ago. In a report submitted at the time it was represented to the Council that the treatment of such conditions was then becoming burdensome to the hospitals, and the doubt was expressed whether, even in course of time, this public duty would be efficiently discharged by their means. Our readers know the difficult position which has since ensued, both for the London County Council and the great charities.

Of the cases requiring medical treatment, the children who suffer from enlarged tonsils and adenoids form the majority. Dr. Kerr is of opinion that no teacher should have charge of a class in an elementary school who cannot decide whether or not a child is suffering seriously from this cause. The proportion of children affected in this way varies considerably in different districts and at different seasons of the year. In the Islington schools about one-third of the children were noted by Mr. Cecil Rowntree as having enlarged tonsils or adenoids, and to a serious extent in one-third of these (10 per cent. in all), whilst in 3 per cent. of the total surgical interference was urgently required. Among 1500 children in Chelsea schools 44 per cent. were found to be suffering from enlarged tonsils or adenoids, and surgical interference was reported necessary in respect of not less than 7 per cent. of these. Miss M. H. F. Ivens found among the aliens in the East-end schools that 34 per cent. of those who heard well had "open mouths," whilst of those with discharging ears 78 per cent. were mouth breathers. In many cases mouth breathing persists, even after operation; and among the mentally defective about 50 per cent. on the average are mouth breathers, the habit having been acquired by catarrh in infancy, and persisting from subsequent neglect. As to the results of operation for this condition, the available returns are very disappointing. According to a table it appears that of 400 cases operated upon 237 were returned as unsatisfactory because the mouth breathing persisted. We are told that children are not recommended for operation merely because of the presence of adenoids, but because of such noticeable symptoms as mouth breathing, snoring respiration, nasal discharges, and associated deformities. Two of the cases cited in the report had been operated upon five times for adenoids, and still were not relived because the noses were blocked by hypertrophied turbinals.

And here Dr. Kerr pertinently remarks that "it is not sufficient that provision is made whereby a third of the children who present pathological conditions among the large number with enlarged tonsils and adenoids can be medically or surgically treated ..... while one-third of the children in the schools present conditions which represent a struggle against factors of ill health; the causes must be sought out and removed as a public task. It is not a mere academic inquiry which is now suggested, but a fundamentally important one, which also lies at the root of tuberculosis and other causes of chronic debility."

School Clinics: Examination of Defectives.

Under the Education (Defective and Epileptic Children) Act of 1899 the care and tuition of defective children in special schools were provided for. The medical examination of candidates for admission to these schools is gradually becoming more critical. These examinations, and particularly those of cases presenting special difficulties, constitute a kind of "school clinic." Consequent on the establishment of schools under the Education Act of 1870 the existence was revealed of a considerable number of children who are unable to profit by the education ordinarily provided for them. In 1890 a committee of inquiry nominated by the Charity Organisation Society estimated that 1 per cent. of the children examined were in need of special care and training. The interest aroused by these special schools and by the representations of committees of various societies led to the appointment in 1897 of a special Departmental Committee on Defective and Epileptic Children. This committee reported that "children exist who, on the one hand, are too feeble-minded to be properly taught in elementary schools by ordinary methods, and, on the other hand, are not so feeble-minded as to be imbecile or idiotic"; and it pointed out that appropriate educational treatment is indispensable for these children. The interest in questions of national physique aroused by the revelations of the South African war and by the reports of the Committees on Physical Education and National Deterioration led to demands for further inquiry, culminating in the appointment of a Royal Commission on Control of the Feeble-minded, the proceedings of which are fully discussed in the present report, to which reference must be made for details.

The Blind and Deaf.

The Education (Blind and Deaf Children) Act of 1893 prescribes the treatment of children whose sight is too defective for ordinary schooling. The smallest amount of vision, even if limited to the perception of direction of light, is of some use in life, and should be conserved to the utmost. There is, however, a considerable amount of blindness of such a nature that ordinary schooling is largely lost; whilst education by the usual "blind methods" is of still less value in later life, vision being valuable even in work. Ten years ago a census was made in the schools for the blind. Ophthalmia neonatorum accounted for 30 or 40 per cent. of the blind cases. The disease having at last been made notifiable, blindness from that cause may be expected to fall, in the next decennium, to one-twentieth of its present amount.

Highly important, from the public health standpoint, is analysis of the causes of deafness. Among 874 cases recently reported as deaf, 41 per cent. were returned as congenitally deaf, whilst the cases of acquired deafness

amounted to more than half. Among the latter meningitis and other brain diseases accounted for 18 per cent. and acute infectious diseases for over 30 per cent. As a cause of deafness measles is twice as important as scarlet fever. The rarer prevalence of the latter disease as a factor of deafness is due partly to the diminished severity of the disease in recent years and partly to increased attention paid to its prevention by sanitary authorities. To suppurative aural disease not caused by fevers 11 per cent. of the total cases were referred; the majority of these were due to adenoids or to middle-ear catarrh, and most of these were avoidable.

Epilepsy among School Children.

From the report it appears that in London alone about 300 children are constantly debarred from educational benefits on account of epilepsy. Besides these, a certain number of children who suffer from *petit mal* are allowed to remain in ordinary schools, or, where the affection is more serious, in special schools. Some epileptic children are highly intelligent, while others are simply imbeciles. Some are placid, others violent and sometimes insane. For the care and treatment of epileptic children there still continues urgent need for suitable and commensurate provision in the metropolis.

(To be concluded.)

ASYLUM REPORTS.

Croydon Mental Hospital, Warlingham, Surrey (Annual Report for the Year 1911).—The average number resident at this hospital during the year was 651. Sixty-five men and 179 women were admitted. Of these, 8 were congenital cases, 88 had been insane for more than 12 months before admission, 24 had been insane for over three months before admission, and 48 had previously suffered from an attack of insanity and had been insane a second time more than 12 months before admission. Among etiological factors, heredity was traceable in 64 cases. Dr. E. S. Pasmore, the medical superintendent, found an insane history in 55·4 per cent. of the admissions. Of these, 25 per cent. were men and 30·4 per cent. women. A direct inheritance of insanity through father or mother was found in 34 per cent. Of those who have an insane history, only 28 per cent. recover; of those who have no insane history, 46·2 per cent. recover. The recovery rate, therefore, is 18·2 per cent. higher in those who have no inherited tendency than in those who have such a tendency. Fifty persons were discharged recovered. Excluding the 65 chronic cases received as boarders from other asylums, this gives a recovery rate of about 36·8 per cent. The deaths numbered 42. Post-mortem examinations were held in 20 cases. In the remaining 22 cases the friends objected. Pulmonary tuberculosis, heart disease, general paralysis, and pneumonia were the chief causes of death. Dr. Pasmore points out that the majority of those admitted were nearly 12 months afflicted before asylum treatment was sought. In many cases the patients had passed through the hands of charlatans and those inexperienced in nursing. The dread of friends to seek early advice from a mental specialist is due to the horror people have to their relations being certified as insane and sent to an asylum. This evil might be mitigated if the lunacy authorities in every town were to coöperate with the local authorities. A hospital mental clinique presided over by the medical officers of the local asylum might be instituted at every local hospital in the country, near which there is an asylum, but in such a fashion as not to clash with other out-patient departments. Medical officers in turn from the asylum could attend on one or two mornings a week. People might then be attracted to bring their friends to such a clinique, on the first sign of any mental aberration manifesting itself, to seek advice. By this means cases in the earlier stage might be detected, and there would be a chance of immediate cure, while those who became chronically insane could be at once drafted to the local asylum.

City of London Asylum, Stone, near Dartford (Annual Report for the Year 1912).—At this hospital the number under treatment during the year was 755, the average daily number resident being 617. The number of admissions, 139, was smaller than that of the previous year by 11. The number of the admissions at this hospital is not, as in other public mental hospitals, an index of the insanity occurring in a certain district, but depends on the number of vacancies present. Acute melancholia was present in 31 cases, acute mania in 18 cases, general paralysis of the insane in 16 cases, and delusional insanity in 25 cases. Thirty-four patients recovered. The proportion per cent. of the recoveries to direct admissions was 31·77. Thirty-three patients died during the year, and 26 necropsies were made. The proportion per cent. of deaths on the daily average number resident was 5·34. The principal causes of death were general paralysis in 8 cases, and senile decay in 5 cases. There were only 4 deaths from tubercular disease. Sixty-three paying patients were received. Dr. R. H. Steen, the resident physician, reports that a new verandah has been opened recently on the female side. Other verandahs have been in constant occupation by day and night, and the wonder is now frequently expressed as to how it was possible to manage without them in the past. All kinds of mental disease were benefited by the rest of the sufferer in bed in the open air, but it is, perhaps, in acutely maniacal conditions that we see the most remarkable results. Dr. Steen has frequently seen a patient who while in a padded room was noisy, excitable, and destructive, on removal to a verandah become quiet and go off to sleep. With regard to other matters of treatment, the use of the prolonged warm bath has proved, in several cases, to be of service. In general paralysis, urotropine has been employed as a routine measure, and the general impression has been that it is of distinct value.

Ayr District Asylum (Annual Report for the Year 1912).—The total number of cases under treatment at this asylum during the year was 687, or 17 below last year's number, which was the highest ever recorded for this asylum. The admissions numbered 138. The male admissions were 15 less than the average for the county during the past 20 years, while the number for the women was only two more. Of those admitted, over 60 per cent. were in indifferent bodily health and over 35 per cent. were in a very weak and exhausted condition. The figures are indicative of the considerable amount of medical and nursing attention involved in the care of the physical state of the insane. With regard to the curability of those cases admitted, 40 per cent. suffered from conditions involving permanent or progressive mental enfeeblement. No less than 40 per cent. of the cases had shown symptoms of mental disease for over a year before admission to the asylum. Dr. G. Douglas McRae, medical superintendent, points out that it is of the utmost importance to the individual to have early and skilled treatment if a cure is to be effected. The disadvantage to society, on the other hand, in failing to make timely provision, is an accumulation of rate-paid mental cripples, which represents a loss to the nation in *personnel* and pocket. Thus the popular prejudice against early asylum treatment jeopardises the individual and still further burdens the State. With regard to the ages of those persons admitted, 23 per cent. were under 30 years of age, 27 per cent. between 30 and 40, 17 per cent. between 40 and 50, 20 per cent. between 50 and 60; 8 were over 70. Hereditary predisposition to insanity was ascertained in nearly 22 per cent. of the cases. Alcoholic excess obtained also in 22 per cent., either as cause or symptom of the mental malady. This is a considerable improvement on the 52 per cent. of the year before. The recovery rate calculated on the number of admissions for both sexes stands at 40·58 per cent. Twenty-six cases were discharged unrecovered, 24 relieved, and 2 not improved. The number of deaths was 56. Six persons died with tuberculosis as principal or contributing cause. This number is a gratifying reduction in figures for the past five years, from 37 per cent. of the total deaths in 1908 to 10·7 per cent. in 1912.

LITERARY INTELLIGENCE.—Messrs. William Hodge and Company, Edinburgh and London, announce for early publication a new volume in their series of Notable English Trials, entitled "The Trial of Dr. Lamson," edited by Hamilton L. Adam, and illustrated with portraits.—Mr. Edward Arnold is publishing a new work by Professor Robert Saundby, M.D., entitled "Old Age: Its Care and Treatment in Health and Disease."

Public Health.

PUBLIC HEALTH AT COLOMBO.

THE medical officer of health of Colombo, Dr. William Marshall Philip, reports a generally satisfactory condition in this city during the year 1911. According to a census taken in March the population numbered 212,295, the remarkable increase of 36 per cent. having occurred during the preceding decennium. Of this increase 7 per cent. was due to an extension of the city boundaries. Even with this deduction the actual increase was more than 10,000 above the estimated number. We are not surprised to hear that the housing problem has become so pressing, partly from the indiscriminate and insanitary erection of buildings that has taken place for many years, and partly from this great increase in numbers, that remedial action is urgently required. The course suggested is to follow the examples of Bombay and Calcutta, and create an improvement trust for the city. The sooner this is done the less costly will it be for the ratepayers. The birth-rate was 24·7 per 1000, an increase of 1·6 over the average for the preceding decennium. The infantile death-rate was 316 per 1000 births, a decrease of 22 on the preceding average; but as it is a native custom to migrate from the city shortly before the birth of the child and return soon after, the birth-rate is too low and the infantile death-rate too high. The general death-rate was 33·8 per 1000, an increase of 0·8 on the decennial average; if corrected for deaths in hospital of non-residents the ratio was 30·9. Pneumonia, causing 4·02 deaths per 1000, was the most fatal disease, this rate having only twice been exceeded during the decade; on the other hand, phthisis caused 2·96 deaths per 1000, a lower ratio than in any year of the decennium, and 0·55 below the average. Since 1906 energetic preventive measures have been undertaken, including, *inter alia*, notification of cases and disinfection of houses affected. In the year 1911 there were 364 houses so treated, and it seems only reasonable to attribute the improvement to this vigorous action. Dr. Philip points out that the next forward step is to provide a hospital for the segregation of advanced and infectious cases, with power to enforce removal when necessary. Diarrhœa and dysentery have caused 4·57 deaths per 1000, a decrease of 1·41 on the decennial average, and the fever mortality has also slightly diminished from 2·46 to 2·29 in the year under review. Of enteric fever 1149 cases were reported, with 396 deaths, a ratio of 1·85 per 1000, this being an increase over the decennial figure of 1·18. The case mortality, 38·9 per cent., shows that many non-fatal cases must have escaped notification. Direct contact is considered to have been a frequent mode of spread among the poorer classes; also latrine infection, either directly or through flies. Dr. Philip speaks strongly of the neglect that many householders are guilty of in regard to the state of their servants' latrines. In this he has our entire support. "The more unpleasant a place the servants' latrine is to inspect the more need is there that the householder should do so, and see that proper steps are taken to improve it and to protect both his own and his neighbour's households. If he fails to do so he must be viewed as a menace to public health." Of 900 cases of enteric fever investigated, the latrines were found to be badly kept in 801. Milk was not an important source of infection, none having been taken in 63 per cent. of the cases, and only tinned milk in a further 16 per cent. Dr. Philip strongly recommends inoculation for the young European arrivals in the colony. Of small-pox, 65 cases occurred with 8 deaths, the infection being, as usual, imported from India. Attention is called to the absence of any special staff for carrying out food inspection, this being done by sanitary inspectors, who have many other duties to perform. A very great improvement has taken place in the character of the milk-supply, only 17 per cent. of 1087 samples having been found to be adulterated; whereas in 1907 adulteration was found in 73 per cent. There is a very large consumption of tinned milk, some of which is of very inferior quality: the recommendation of the medical officer that it should be an offence to sell tinned milk, with instructions on the label which if carried out would reduce the milk below the Colombo standard, is most reasonable. Injustice is done to the local milk dealers and injury to the health of infants by the use of inferior brands of tinned milk. Dr. Philip also recommends that tinned meat, butter, &c., should have the date of filling clearly impressed upon each tin, without which mark it should be liable to seizure. In this he has the support of all public health authorities. The native laundry arrangements at Colombo are as unsatisfactory as in most places in the East; we know no better solution than that here recommended, that there should be two standards, one for the ordinary *dhobie*, and another and higher standard of sanitation for a first-class *dhobie*, for which the customer must be prepared to pay at a higher rate. Good work is done in systematic municipal cleansing of compounds and especially of filthy latrines, and in dealing with mosquito breeding places. We congratulate Dr. Philip on the results of a year's work under the extremely difficult sanitary conditions of Colombo.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In the 96 English and Welsh towns with populations exceeding 50,000 persons at the last Census, and whose aggregate population at the middle of this year is estimated at 17,852,766 persons, 9353 births and 5337 deaths were registered during the week ended Saturday, April 5th. The annual rate of mortality in these towns, which had been 17·0, 16·5, and 16·9 per 1000 in the three preceding weeks, declined to 15·6 per 1000 in the week under notice. During the 13 weeks of the quarter just ended the mean annual death-rate in these towns averaged 16·9 against 17·5 per 1000 in London during the same period. The death-rates last week in the several towns ranged from 5·7 in Rotherham, 6·6 in Southend-on-Sea, 7·0 in Enfield, 7·7 in Ealing, and 7·8 in Portsmouth, to 20·9 in Stoke-on-Trent, 21·2 in Plymouth, 22·2 in Middlesbrough, 23·1 in St. Helens, and 24·9 in Stockton-on-Tees.

The 5337 deaths from all causes in the 96 towns were 455 fewer than the number in the previous week, and included 402 which were referred to the principal epidemic diseases, against numbers declining from 464 to 410 in the three preceding weeks. Of these 402 deaths, 215 resulted from measles, 60 from whooping-cough, 53 from infantile diarrhœal diseases, 35 from diphtheria, 23 from scarlet fever, and 16 from enteric fever, but not one from small-pox. The mean annual death-rate from these diseases last week was equal to 1·2, against 1·3 and 1·2 per 1000 in the two preceding weeks. The deaths attributed to measles, which had been 229, 220, and 208 in the three preceding weeks, slightly rose to 215 last week, and caused the highest annual death-rates of 2·8 in Plymouth and in Smethwick, 3·3 in Wolverhampton, 3·5 in Bury, 3·9 in Walsall, 6·0 in West Bromwich, and 7·3 in St. Helens. The deaths referred to whooping cough, which had been 83, 72, and 67 in the three preceding weeks, further declined to 60 last week, and included 16 in London, 6 in Stoke-on-Trent, 5 in Bristol, 5 in Liverpool, and 3 in Warrington. The fatal cases of diarrhœa and enteritis (among infants under 2 years of age), which had been 69, 67, and 71 in the three preceding weeks, fell to 53 last week; 17 deaths were registered in London, 6 in Liverpool, 3 in Manchester, and 3 in Salford. The deaths attributed to diphtheria, which had declined from 54 to 37 in the four preceding weeks, further fell to 35 last week, and included 6 in London, 5 in Leeds, and 2 each in Willesden, Stoke-on-Trent, Liverpool, St. Helens, Middlesbrough, and Swansea. The deaths referred to scarlet fever, which had been 23, 28, and 19 in the three preceding weeks, were 23 last week, of which number 5 occurred in London, 5 in Birmingham, and 2 in Manchester. The fatal cases of enteric fever, which had been 9, 13, and 8 in the three preceding weeks, rose to 16 last week, and included 2 in London and 2 in Sheffield.

The number of scarlet fever patients under treatment in the Metropolitan Asylums and the London Fever Hospitals, which had steadily declined from 2112 to 1455 in the 14 preceding weeks, had further fallen to 1410 on Saturday last; 167 new cases were admitted during the week, against 164, 156, and 168 in the three preceding weeks. These hospitals also contained on Saturday last 900 cases of diphtheria, 854 of measles, 282 of whooping-cough, and

39 of enteric fever, but not one of small-pox. The 1416 deaths from all causes in London were 93 fewer than the number in the previous week, and were equal to an annual death-rate of 16·3 per 1000. The deaths referred to diseases of the respiratory organs, which had steadily fallen from 453 to 380 in the five preceding weeks, further declined to 346 last week, but were 110 above the number recorded in the corresponding week of last year. The deaths attributed to influenza last week numbered 45, against 65 and 47 in the two preceding weeks.

Of the 5337 deaths from all causes in the 96 towns, 159 resulted from different forms of violence, and 402 were the subject of coroners' inquests. The causes of 27, or 0·5 per cent., of the total deaths were not certified either by a registered medical practitioner or by a coroner after inquest. All the causes of death were duly certified in London and in its 14 suburban districts, in Manchester, Leeds, Bristol, Bradford, Hull, Newcastle-on-Tyne, Nottingham, and in 60 other smaller towns. Of the 27 uncertified causes of death, 5 were registered in Birmingham, 3 in Liverpool, 3 in Warrington, 3 in Sheffield, and 2 each in Stoke-on-Trent, Preston, and Sunderland.

HEALTH OF SCOTCH TOWNS.

In the 16 largest Scotch towns with an aggregate population estimated at 2,259,600 persons at the middle of this year, 1256 births and 744 deaths were registered during the week ended Saturday, April 5th. The annual rate of mortality in these towns, which had steadily declined from 20·7 to 17·2 per 1000 in the five preceding weeks, was again 17·2 per 1000 in the week under notice. During the 13 weeks of the quarter just ended the mean annual death-rate in these Scotch towns averaged 19·1, against a corresponding rate of 16·9 per 1000 in the 96 large English towns. Among the several towns the death-rates last week ranged from 9·1 in Kirkcaldy, 9·2 in Ayr, and 11·0 in Paisley, to 19·5 in Kilmarnock, 20·8 in Leith, and 24·8 in Greenock.

The 744 deaths from all causes were equal to the number in the previous week, and included 75 which were referred to the principal epidemic diseases, against 88 and 83 in the two preceding weeks. Of these 75 deaths, 43 resulted from whooping-cough, 13 from infantile diarrhœal diseases, 8 from measles, 6 from diphtheria, 3 from enteric fever, and 2 from scarlet fever, but not one from small-pox. These 75 deaths from the principal epidemic diseases were equal to an annual death-rate of 1·7, against 1·2 per 1000 in the 96 large English towns. The deaths attributed to whooping-cough, which had been 50, 55, and 44 in the three preceding weeks, were 43 last week, and included 22 in Glasgow, 7 in Edinburgh, 5 in Leith, and 4 in Greenock. The deaths of infants (under 2 years of age) referred to diarrhœa and enteritis were 13 last week, against an average of 17 in the four preceding weeks; of this number 8 were recorded in Glasgow, 4 in Dundee, and 1 in Edinburgh. The fatal cases of measles, which had been 6, 5, and 9 in the three preceding weeks, were 8 last week, and included 4 in Glasgow and 2 in Falkirk. The 6 deaths attributed to diphtheria were equal to the average in the three preceding weeks, and comprised 3 in Glasgow and 3 in Dundee. The 3 deaths referred to enteric fever occurred in Glasgow, Edinburgh, and Greenock respectively; the 2 fatal cases of scarlet fever were recorded in Glasgow. In addition to the above diseases, 2 deaths from typhus fever were registered in Glasgow.

The deaths referred to diseases of the respiratory system, which had been 144, 166, and 154 in the three preceding weeks, declined to 127 last week; 27 deaths were attributed to different forms of violence, against 25 and 17 in the two preceding weeks.

HEALTH OF IRISH TOWNS.

In the 27 town districts of Ireland, with an aggregate population estimated at 1,199,180 persons at the middle of this year, 746 births and 535 deaths were registered during the week ended Saturday, April 5th. The annual rate of mortality in these towns, which had been 23·4, 21·7, and 23·8 per 1000 in the three preceding weeks, declined to 23·3 per 1000 in the week under notice. During the 13 weeks of the quarter just ended the mean annual death-rate in these Irish towns averaged 22·2 per 1000; in the 96 large English towns the corresponding death-rate did not exceed 16·9, while in the 16 Scotch towns it was equal to 19·1 per 1000. The annual death-rate last week was equal to 27·9 in Dublin (against 16·3 in London and 18·7 in Glasgow), 21·2 in Belfast, 18·4 in Cork, 22·9 in Londonderry, 14·9 in Limerick, and 24·7 in Waterford, while in the remaining 21 smaller towns the mean death-rate was equal to 21·2 per 1000.

The 535 deaths from all causes in the 27 Irish towns were 12 fewer than the number in the previous week, and included 39 which were referred to the principal epidemic diseases, against 36 and 46 in the two preceding weeks. Of these 39 deaths, 14 resulted from measles, 11 from infantile diarrhœal diseases, 6 from diphtheria, 5 from whooping-cough, and 3 from scarlet fever, but not one from small-pox or from enteric fever. These 39 deaths from the principal epidemic diseases were equal to an annual death-rate of 1·8 per 1000; in the 96 large English towns the death-rate from these diseases last week did not exceed 1·2, while in the 16 Scotch towns it was equal to 1·7 per 1000. The deaths attributed to measles, which had been 13, 14, and 17 in the three preceding weeks, slightly declined to 14 last week, and included 4 in Newry, 4 in Wexford, and 2 each in Belfast, Cork, and Tralee. The deaths of infants (under 2 years of age) referred to diarrhœa and enteritis, which had been 11, 7, and 8 in the three preceding weeks, rose to 11 last week, and comprised 7 in Dublin and 4 in Belfast. The 6 fatal cases of diphtheria, of which 4 occurred in Dublin and 2 in Belfast, were equal to the average in the three preceding weeks. The deaths attributed to whooping-cough, which had been 6, 4, and 10 in the three preceding weeks, declined to 5 last week, of which number 3 were registered in Waterford and 2 in Dublin. Of the 3 deaths referred to scarlet fever 2 were recorded in Belfast and 1 in Dublin. In addition to the above diseases a fatal case of typhus fever occurred in Dublin.

The deaths in the 27 Irish towns referred to diseases of the respiratory system, which had been 136, 138, and 122 in the three preceding weeks, rose to 142 in the week under notice. Of the 535 deaths from all causes, 169, or 32 per cent., occurred in public institutions, and 8 resulted from different forms of violence. The causes of 21, or 3·9 per cent., were not certified either by a registered medical practitioner or by a coroner after inquest; in the 96 large English towns the proportion of uncertified causes of death last week did not exceed 0·5 per cent.

THE SERVICES.

NEW MEDICAL DIRECTOR-GENERAL OF THE NAVY.

Surgeon-General William May, C.B., has been appointed Medical Director-General of the Navy, in succession to Surgeon-General Sir James Porter, K.C.B.

ROYAL NAVY MEDICAL SERVICE.

The following appointments have been notified:—Fleet-Surgeon: H. E. Tomlinson to the *Victory*, additional, for Portland Depôt, temporarily, on the *Imperieuse* paying off. Staff-Surgeons: A. S. Bradley to the *Excellent*, additional, for the *Dido*, on recommissioning; D. P. Chapman to the *Gibraltar*, additional, for the *Grafton*, on recommissioning; and W. P. Walker, to the *Gibraltar* for the *Crescent*. Surgeon: V. L. Matthews to the *Victory*, additional, for disposal, and to the Royal Marine Artillery Division, Eastney.

The Haslar Course for Acting Surgeons.

The Course for Acting Surgeons, Royal Navy, was brought to a close on March 28th at Haslar, when the prizes were distributed by Surgeon-General Howard Todd. Special commendation was awarded to Acting Surgeons A. E. Malone, H. M. Whelan, and R. F. P. Cory for zeal and ability. The gold medal was gained by Acting Surgeon Malone (Dublin University), who obtained the highest aggregate marks in the London, Greenwich, and Haslar examinations; and the silver medal by Acting Surgeon Whelan (University College, Cardiff, and the London Hospital), who took second place. The group prize for the subjects in which instruction is given at Greenwich was awarded to Acting Surgeon A. E. Malone; and the group prizes of the instruction given at Haslar were awarded in Group I. to Acting Surgeon Whelan, and in Group II. to Acting Surgeon Cory (St. Thomas's Hospital).

The order of seniority, as determined by the results of the examinations held at London, Greenwich, and Haslar, is given below:—

	Marks.		Marks.
1. A. E. Malone, M.B. ...	3664	6. J. T. D. Higgins, M.B.	3872
2. H. M. Wholan	3502	7. J. G. Boal, M.B.	3860
3. R. F. P. Cory	3467	8. F. S. B. Wickham... ...	3845
4. H. St. C. Colson	3371	9. S. Punch	3833
5. G. A. Finogan...	3069		

ROYAL ARMY MEDICAL CORPS.

Colonel C. E. Faunce has taken up duty as Assistant Director of Medical Services to the Woolwich District and in charge of the Royal Herbert Hospital, in succession to Colonel R. W. Ford, D.S.O., who has been placed on the half-pay list.

Lieutenant-Colonel J. B. Wilson has been selected for the increased rate of pay under Article 317 of the Royal Warrant for Pay and Promotion. Lieutenant-Colonel S. Macdonald has taken up duty as Medical Inspector of Recruits to the Southern Command at Headquarters, Salisbury. Lieutenant-Colonel A. W. Bewley has been selected for appointment as Deputy-Assistant Director of Medical Services to the Northern Command at York, in succession to Lieutenant-Colonel F. R. Newland, appointed to hold charge of the Military Hospital at Dover. Lieutenant-Colonel C. Cooper-Reilly has been transferred from the Belgaum Cantonment to Colaba, Bombay.

Major E. W. W. Cochrane has arrived home for duty from Bermuda. Major G. T. K. Maurice has been transferred from the Military Hospital at Reading to the Military Hospital at Tidworth, Salisbury Plain. Major M. P. Corkery has been appointed to the Military Hospital at Fermoy. Major T. B. Unwin has left the London District for a tour of service in the Sierra Leone Protectorate. Major A. L. A. Webb has been appointed for duty in the Scottish Command. Major R. W. H. Jackson has been selected to hold charge of the Military Hospital at Weymouth. Major E. McDonnell has arrived home for duty from Bermuda. Major F. M. Mangin has embarked for a tour of service in India. Major T. E. Fielding has been appointed to the Southern Command. Major W. G. Beyts has been granted three months' general leave of absence from India. Major J. F. M. Kelly has been appointed to the Eastern Command. Major A. H. N. Mitchell has been transferred from Netley to the Eastern Command.

Captain A. W. Bevis has been appointed to the Belfast District for duty. Captain W. B. Purdon has taken up duty at the Military Hospital, Devonport. Captain C. J. W. Wyatt has been placed under orders for a tour of service in the Sierra Leone Protectorate. Captain A. Dawson has been appointed to the Dublin District for duty. Captain F. A. H. Clarke has left Glasgow for a tour of service in India. Captain J. B. Meldon has been transferred from the Military Hospital at Dover to Brighton. Captain W. C. Smales has taken up duty at the Military Hospital, Portsmouth. Captain P. Sampson has been appointed to the Irish Command. Captain J. W. Houston has been transferred from the Military Hospital at Colaba to the First (Peshawar) Division of the Northern Army in India.

INDIAN MEDICAL SERVICE.

The King has approved of the retirement of the undermentioned officers of the Indian Medical Service:—

Lieutenant-Colonel John Macfarlane Cadell (dated March 5th, 1913). Lieutenant-Colonel Charles Hardwick Louw Meyer (dated March 15th, 1913). Major Thomas Edgar Watson (dated March 15th, 1913).

Lieutenant-Colonel G. T. Birdwood has been selected for appointment as Professor of Pathology on the staff of the King George Medical College at Lucknow. Lieutenant-Colonel W. Molesworth has been granted one year's combined leave of absence home from India. Lieutenant-Colonel H. Austin Smith, civil surgeon, Simla East, has been appointed to hold officiating Medical Charge of Army Headquarters Staff and Establishment.

Major P. Dee has been appointed to officiate as a First-class Civil Surgeon under the orders of the Government of Burma, in succession to Major E. R. Rost, granted leave of absence. Major J. N. Walker has been selected for appointment as Civil Surgeon at Aligarh. Major E. L. Perry has been granted privilege leave for three months combined with four months' study leave home from India. Major C. C. S. Barry has been selected as Superintendent of the General Hospital at Rangoon, in succession to Major T. Stoddart, transferred to Mogok. Major A. M. Fleming has taken up duty at Jubbulpore, in succession to Captain J. M. A. Macmillan, appointed Civil Surgeon at Amraoti. Major T. E. Watson has arrived home on leave of absence from India.

Captain M. A. Nicholson has been selected for appointment as Medical Officer in charge of the Lawrence Military Asylum at Sanawar, in succession to Captain J. Simpson. Captain S. C. Pal has been selected for appointment as substantive Medical Officer to the 108th Native Infantry Regiment stationed at Bangalore, in succession to Major W. H. Cox, D.S.O. Captain J. S. O'Neill has been appointed to officiate as Civil Surgeon at Jhansi. Captain A. N. Dickson has arrived home on leave of absence from India. The services of Captain H. H. G. Knapp have been placed permanently at the disposal of the Government of Burma for employment in the Jail Department. Captain A. Cameron has been selected for appointment as Chief Plague Medical Officer in the United Provinces of Agra and Oudh, in succession to Lieutenant-Colonel H. B. Melville. Captain G. J. Davys has been appointed Specialist in the Prevention of Disease and placed in charge of the Bacteriological Research Laboratory at Brigade Headquarters, Jubbulpore. Captain C. H. Barber has relinquished medical charge of the Banda District. Captain C. Rigby Lynn has been transferred from Trichinopoly to Delhi and appointed Medical Officer to the 11th Lancers. Captain A. McD. Dick has been appointed a Specialist in Advanced Operative Surgery. Captain A. J. V. Betts has returned to India from leave of absence home. Captain E. A. Walker, officiating ophthalmic surgeon at the General Hospital, Rangoon, has been appointed to officiate as Civil Surgeon at Bassein, in succession to Lieutenant-Colonel J. Penny. Captain J. Anderson has been selected for appointment as Civil Surgeon at Hazara. Captain J. Taylor has been granted three months' privilege leave combined with six months' study leave home from India.

Lieutenant R. A. Murphy has taken up duty as Medical Officer to the Surma Valley Light Horse.

SPECIAL RESERVE OF OFFICERS.

Royal Army Medical Corps.

Lieutenant Mark Anthony resigns his commission (dated April 2nd, 1913). Lieutenant Alexander D. d'Avray is confirmed in his rank. Cadet Harry Chapman Sinderson, from the Edinburgh University Contingent, Officers Training Corps, to be Lieutenant (on probation) (dated March 6th, 1913). Harry Evans, late Cadet, Edinburgh University Contingent, Officers Training Corps, to be Lieutenant (on probation) (dated Feb. 15th, 1913). Cadet Staff Sergeant Walter Tennyson McCurry, from the Belfast University Contingent, Officers Training Corps, to be Lieutenant (on probation) (dated March 11th, 1913).

TERRITORIAL FORCE.

Royal Army Medical Corps.

3rd East Lancashire Field Ambulance, Royal Army Medical Corps: Major Wilfred M. Steinthal to be Lieutenant-Colonel (dated March 1st, 1913).

Supernumerary for service with the Officers Training Corps: Lieutenant George A. Williamson is appointed to serve with the Aberdeen University Contingent, Senior Division, Officers Training Corps (dated July 13th, 1912).

Attached to Units other than Medical Units.—Lieutenant Arthur H. Norris to be Captain (dated Dec. 21st, 1912).

Sanitary Service.—Lieutenant James Dundas, from the 2nd Home Counties Field Ambulance, Royal Army Medical Corps, to be Captain, whose services will be available on mobilisation (dated April 9th, 1913).

ROYAL ARMY MEDICAL CORPS EXAMINATION.

An examination for commissions in the Royal Army Medical Corps (probably not more than five) will be held on July 23rd. Applications to compete should be made to the Secretary, War Office, not later than July 14th.

COLONIAL MEDICAL SERVICES.

West African Medical Staff.—Dr. A. W. Atkinson, medical officer, Gold Coast, has retired with a gratuity, and Dr. St. G. Gray, senior medical officer, Southern Nigeria, has retired on a pension. The following gentlemen have been selected for appointment to the staff: Mr. N. A. D. Sharp (Gold Coast), Dr. J. C. C. Hogan (Northern Nigeria), and Dr. J. A. Beattie (Northern Nigeria).

Correspondence.

"Audi alteram partem."

MEDICAL OFFICERS OF HEALTH (SUPERANNUATION) BILL: AN APPEAL TO SCHOOL MEDICAL INSPECTORS AND TUBERCULOSIS OFFICERS.

To the Editor of THE LANCET.

SIR,—In the House of Commons on April 18th there is set down for the second reading the Medical Officers of Health (Superannuation) Bill. Medical officers of health, whether whole-time or part-time, are included in the provisions of the Bill, which is on a contributory basis.

A memorandum on the Bill is contained in the April number of *Public Health*, which sets out the strong claims for superannuation of medical officers of health. Medical officers of health are now generally recruited from the ranks of the junior branches of this service—namely, school medical inspectors and tuberculosis officers, of whom there are at present at least three times as many as of medical officers of health. This means that there will always be the larger proportion of officers remaining in these junior branches of the service which are paid at a rate of salary ranging from a half to a third of that paid to whole-time medical officers of health.

Since the Insurance Act came into operation school medical inspectors are, outside institutions, the lowest paid members of the profession. All the arguments in the Bill can be urged in the case of medical inspectors and tuberculosis officers, and the argument contained in the following extract from the memorandum on the Bill can be much more powerfully supported in favour of the junior services:

> Moreover they (medical officers of health) can hardly be classed among highly paid officials, and have thus little opportunity for saving sufficient from their incomes to enable them to retire when it might be distinctly in the public interest to do so.

My object in writing is to point out that the Bill does not include school medical inspectors or tuberculosis officers, and to have an amendment brought forward, and, if possible, incorporated in the Bill during the Committee stage to make the words "medical officers of health" include school medical inspectors and tuberculosis officers. To this end may I ask all school medical inspectors and tuberculosis officers to write to me without delay, saying whether they are in favour of such a course; and to write or interview their Member of Parliament urging him to assist the progress of the Bill safely through Parliament.

I am, Sir, yours faithfully,

ALEXANDER GRAHAM,
School Medical Inspector.

West Ham, April 7th, 1913.

PROFESSOR BIEDL'S TREATISE ON "THE INTERNAL SECRETORY ORGANS."

To the Editor of THE LANCET.

SIR,—Although I consider any controversy with Dr. Leonard Williams in reference to the English translation of my work, "The Internal Secretory Organs," futile and to be deprecated, his letter in THE LANCET of March 29th calls for some remark and constrains me to reply. With your permission I also desire to recapitulate the inner history of the translation and to explain my part in the origin of the strictures referred to by your reviewer.

In my contract with the London publisher I stipulated in the first place that the translation was to be made by a competent expert, and further that I was to be allowed to supervise and to correct it as far as was necessary. I was informed by the publisher that Dr. Leonard Williams would undertake the responsibility of the translation, and I was not a little astonished to find on the publication of the book Miss Linda Forster as translator. I was, moreover, disagreeably surprised that the preface in the original from the pen of Professor Richard Paltauf, of Vienna, had been suppressed and replaced by a foreword from Dr. Leonard Williams without my first being referred to. I am convinced that the original preface would have been of greater interest to the English reader.

In the typewritten manuscript which was submitted to me in parts—often after a considerable interval of time—I found various inaccuracies, names of authorities wrongly spelt and mistakes of more essential importance due to an imperfect understanding of the original text all requiring correction. I considered it my duty to correct these in detail. To these corrections, for example, it is due that the names of the authors in the English version are more correctly given than in the original. I would not have corrected inaccuracies in the language had my attention not been drawn to them by a thoroughly competent man, Dr. C. Lawrence Herman, of Capetown, who undertook the weary and thankless task of revising and correcting the manuscript.

With due deference to Dr. Leonard Williams, I maintain that these corrections in the majority of instances have been incorporated with great advantage to the translation. If the English version "as a whole is well done and gives very fairly the spirit of the original," this is undoubtedly due in some measure to my friend Dr. Herman. The remarks of Dr. Williams in reference to my "professorial style" and my "knowledge of the English language" are unnecessary and uncalled for, while his desire to saddle me with the responsibility for "some Germanicisms and curious renderings" is unjust. If it amuses Dr. Williams to make fun of my corrections "auf echteste und korrekteste pädagogische Weise," I can only assure him that the revision and correction of the manuscript were undertaken in the most loyal and friendly spirit of coöperation, with the sole desire of making the English version worthy of being read by all interested in the subject in England and elsewhere. Moreover, I am not without hope that Dr. Williams, on more mature consideration, will come to see that his remarks were ill-judged and little befitting the occasion.

The just strictures of your reviewer in his sympathetic and courteous remarks are sufficient evidence that it would have been better had the printer's proofs been sent to me as well for final correction, in which case such errors as "jodothyrin in suprarenals," "gall" instead of bile, "secretary" instead of secretory, "intercranial pressure" for intracranial, would not have escaped me.

Unusual as it may be that an author reserves to himself the right of correcting and amending the translation of his work in a foreign language, the desire of Dr. Leonard Williams to place to my credit any deficiencies in the English translation makes it clear to me that in this instance at least I have not sufficiently safeguarded myself in all directions. Thanking you in anticipation for the publication,

I am, Sir, yours faithfully,

Prof. BIEDL.

Wien, April 1st, 1913.

SOME POINTS IN SURGICAL TECHNIQUE.

To the Editor of THE LANCET.

SIR,—A simple and efficacious plan has occurred to me for ensuring a completely skin-covered, and therefore skin-free, wound during operation, whereby one potent source—the patient's skin—of wound contamination might be obviated. As I feel sure it will prove of value and commend itself to others I will describe it. It is carried out either by the aid of suture or Michel's clips. Directly the skin incision is made and before the operation is further proceeded with, on both sides of the wound the margins of the sterile covering are tucked round the skin margins so as to hide completely the skin from view and fixed in this position till the end of the operation. If a suture be used a continuous or interrupted one is passed through covering, skin, and covering in the order named, whilst if the clips be exploited they are clamped to the skin margins by penetrating the two layers of covering. At the extremities of the wound two clips are applied so as to keep together the two margins of the covering. By this simple, facile, and speedy procéss the skin is covered and is not seen or touched during the operation (to my mind, a most important, although usually neglected, precaution). Thus, the sterile cloth is carried round the skin margins on to the subcutaneous tissue, on the one hand, and in the other direction covers the skin in the neighbourhood in the ordinary way, and hence it will be seen that the sterile cloth is continuous with the germ-free subcutaneous

tissue, and as far as the patient is concerned we have a sterile field and wound. I strongly commend this simple expedient. I have elsewhere described some towel clips constructed to my requisition by Messrs. Mayer, Meltzer, and Co., one of the chief objects of which was to bring about the same result.

Bearing also on the subject of primary union of wounds, I would like to call attention to a plan adopted recently on my own initiative in regard to the question of operative skin preparation and treatment. This method is based upon the phenomenon, which I think cannot be denied, that all clean wounds heal much better if kept dry, and that moisture undoubtedly favours or provokes inflammation. No one would think of applying a moist dressing to, or keeping wet, a clean wound if healing by first intention were desired, for such an action would court disaster. To operate on a sodden skin would be folly, and I think a good deal of the trouble experienced with wounds, even after the most careful preparation, is due to previous humidity; and to my mind there is no more culpable *agent provocateur* than the favoured and time-honoured protective compress. Probably much of the failure in, and past difficulty in explaining the state of, operative wounds finds its elucidation here. This old and favourite method might be called the wet compress method (lint, protective and wool) as opposed to the one to be described—namely, the dry compress method. I believe much of the value and credit gained by iodine applications to be due not only or necessarily to its hyperæmic and bactericidal properties, but also to the desiccating properties of this preparation. Water being a *sine quâ non* for the life of vital organisms, and therefore of bacteria, and dryness spelling death or quiescence, it would appear that the day of moist applications is over, and that no compress or dressing that includes protective (moisture retaining) should henceforward be considered. Pathological knowledge and surgical experience condemn such. The dry method is as follows. The skin is washed by ether soap (never scrubbed), then gone over with turpentine, followed by spirit of biniodide of mercury. Now come the chief modifications. The skin is covered by sterilised talcum toilet powder; any of these may be used, as the preparations of Parke Davis, Colgate, Sewar, &c. These powders are free from irritating antiseptics, and have valuable desiccating properties. The powder is now gently rubbed into the skin by a sterile piece of wool, after which the part is covered by a thick layer of powder, and the whole region covered by a dry sterile compress, which is bandaged on, but mind, no protective of any kind to keep the skin sodden or retain moisture, and therefore invite bacterial activity and disaster. At the time of operation the skin presents an ideal appearance, for it is dry, and, I think, as a fact and for this reason gives gratifying results; at least, such has been my experience so far. At the end of the operation the line of incision is covered with a thick layer of powder; incidentally this prevents adhesion of wound to dressings, and thereby obviates this source of irritation to the patient as well as to the wound. On subsequent days powder is applied again as required. I have noticed during the adoption of this technique not only absence of redness at the site of incision but also at the sites of the suture punctures. Perhaps a combination of this powder method and iodine might give even better results. But so far I am satisfied.

I would, therefore, lay emphasis on the dry method of preparing the skin, the avoidance of anything that will render moistness inevitable, especially the old and bad protective (oiled silk, gutta-percha tissue, &c.) compress application. The results so far obtained promise well for the future and are most encouraging.

I am, Sir, yours faithfully,

G. S. THOMPSON, F.R.C.S. Eng.

Kimberley, S. Africa, March 10th, 1913.

A DANGER TO HEALTH IN THE NEW FOREST.

To the Editor of THE LANCET.

SIR,—My attention has been called to an article with the above title which appeared in THE LANCET of March 29th, p. 910, that does grave injustice to the work of the medical officer of health for Ringwood, Mr. Charles E. Blackstone, and also to that of the medical officer of health for the county, Dr. Robert A. Lyster, and to the rural district council. Anyone reading your remarks would conclude that a plague spot, indeed, has been discovered, and that it was administered by a most careless local authority, assisted by thoroughly incompetent officials.

The report of the medical inspector of the Local Government Board, Dr. H. A. Macewen, upon which your remarks are based, is an unfortunate and misleading one, and contains many apparent errors in the statement of facts, concerning which it is difficult to understand how mistakes could arise. As, however, correspondence is going on between the Ringwood district council and the Local Government Board upon this report, I will not attempt to dealt with that matter here, but will instead briefly state what actually occurred. Before doing so I may as well freely admit that the water-supply of Ringwood is derived from shallow wells. As the result of examinations from time to time by successive medical officers of health these wells have not been unfavourably reported on, and the district council have given special attention to endeavour to preserve them from surface pollution. There has been nothing in the vital statistics of the district to cause concern, and though a public water-supply is probably an advantage, provided that it is derived from absolutely reliable sources, yet there have been no signs until recently that the ratepayers would sanction such a course.

Coming now to the epidemic of enteric fever last year, the first notifications reached the medical officer of health on August 13th, the cases then being of a mild type, and, I believe, entirely confined to children. The earliest case of the commencement of illness discovered here was on July 26th. We can find no trace of a case on July 18th, as mentioned by you. At all events, no case was notified until August 13th, no doubt because the disease could not be clearly diagnosed before then. On August 19th the district council met, and first heard of the outbreak. They consulted with their medical officer of health and with Dr. J. Gott, Poor-law medical officer, and upon their advice decided to at once engage nurses to work amongst the patients at their homes. The question of an isolation hospital was discussed, but temporarily allowed to remain in abeyance, as doubt was expressed as to the parents consenting to the removal of their children. It was arranged, however, that the health committee of the district council should be strengthened, and be summoned directly the epidemic showed signs of increasing. This committee met on August 21st and many times afterwards, and at once decided to open an isolation hospital, which was done on August 27th, or eight days after the council first heard of the outbreak, and 14 days after the receipt of the first notification. You refer to this hospital as being "of an unsatisfactory kind." It consisted of a fair-sized farmhouse in an open situation, with lofty rooms. A large Doecker hut was added as an annexe and a day room for convalescents was built of wood and galvanised iron in addition. It is a matter of opinion, of course, but most competent judges thought the hospital accommodation fairly good and decidedly creditable under the circumstances. On August 29th a letter was received by the clerk to the district council from the Local Government Board asking that the former body would request their medical officer to submit a report upon the epidemic. The next meeting of the council took place on Sept. 2nd, when this letter came before them and was dealt with. But on August 31st, late at night, Dr. Macewen appeared upon the scene, full of surprise that the desired report had not been received. He called upon the medical officer of health, who, late though it was, was extremely busy, and expressed his views in such language that a speedy termination of the interview was brought about. He also called on the chairman, the vicar of the parish, who no doubt received him with every attention, but as a clergyman with a heavy Sunday's duty before him the next day could hardly be expected to unduly prolong the conversation.

As to the cause of the epidemic, directly its presence was made clear every step was taken to try and establish from whence it originated. Water, milk, school contact, and so on, were all investigated in turn, Dr. Lyster, county medical officer of health, rendering the greatest assistance in the endeavours that were made. In pursuit of this object he had been in conference with Mr. Blackstone on August 31st, and had borrowed the written data for consideration until Sept. 2nd, when he returned it. This was the reason why this data was not available for Dr. Macewen's perusal on the evening of the same day, as he perfectly well knew. Although Dr. Lyster returned the papers on Monday,

Sept. 2nd, it seems singular, but it is a fact, that Dr. Macewen never again asked to see them. It is also the case that he never once interviewed the district council, though they would have been pleased to see him. He casually met two members by chance, of whom I was one, and had a few words of conversation of quite an unofficial character, and, as already stated, he called upon the chairman. Dr. Macewen has expressed the opinion that the cause of the epidemic was the stream you allude to. I have been through his evidence most carefully, comparing it with reliable data, and as far as I am able to judge his theory and his evidence tumble to pieces when tested. In reports submitted to the district council, Mr. Blackstone states that, though the matter is not free from doubt, he believes that the strongest evidence points to the epidemic having originated from ice-cream supplied at school treats, the subsequent cases being contacts, and the ice-cream maker an intermittent carrier. I understand that Dr. Lyster also favours this view, though investigations are still going on in connexion with it.

I hope in justice to two capable and most assiduous medical men, if not to the district council, you will take steps to correct the most unfortunate impression conveyed to anyone reading your article who was ignorant of the real facts of the case.—I am, Sir, yours faithfully,

HOWARD TOZER,
Vice-chairman, Ringwood Rural District Council.

Ringwood, April 6th, 1913.

QUIS CUSTODIET IPSOS CUSTODES?

To the Editor of THE LANCET.

SIR,—A few days ago I sent a patient with somewhat obscure symptoms to have his blood examined at a well-known clinical laboratory in London, and received back a report which strongly suggested that he was suffering from an early stage of pernicious anæmia. In view of the importance of the matter I decided, before starting him on a course of arsenic, to obtain further corroboration of the diagnosis, and accordingly sent him to another laboratory in London for a second blood examination. A report followed which entirely negatived the diagnosis of pernicious anæmia. Only three days elapsed between the two examinations; during that time there was no alteration in the patient's symptoms and he had no special treatment. In each case the blood was taken at the laboratory, and at about the same hour of the day. I append the chief points in the two reports. It is upon facts such as these that the unfortunate physician has nowadays largely to rely for his diagnosis and his treatment. I need only add that I had a third examination made with the greatest care by a hospital colleague, and the results obtained differed materially from those given in both the previous reports, though they approximated more nearly to those in the first.

	Report 1.	Report 2.
Hæmoglobin	75 per cent.	84 per cent.
Red corpuscles	2,900,000 per c.mm.	5,485,000 per c.mm.
White corpuscles ...	5,000 ,,	9,000 ,,
Colour index	1·3	0·8
Poikilocytosis	Moderate.	Absent.
Differential count—		
Polymorphonuclears	67·0 per cent.	57·0 per cent.
Small lymphocytes	28·5 ,,	30·0 ,,
Large lymphocytes	2·5 ,,	7·3 ,,
Eosinophiles	1·5 ,,	5·7 ,,
Mast cells	0·5 ,,	

I am, Sir, yours faithfully,

Cavendish-place, W., April 5th, 1913. J. WALTER CARR.

RECOVERY IN ACUTE TUBERCULOUS PNEUMONIA.

To the Editor of THE LANCET.

SIR,—I read with some interest Dr. S. N. Galbraith's paper on "Acute Tuberculous Pneumonia: Recovery" in to-day's issue of THE LANCET. I am of opinion that such cases are far from uncommon, though I would suggest that the prognosis is never really good.

The following is a good example of this condition. The patient, a youth 16 years of age, was admitted to the Ayrshire Sanatorium on August 16th, 1910. His illness commenced 16 weeks before admission and followed directly on over-exertion, produced by a long bicycle ride; he was, however, walking two or three miles every day until his admission to the sanatorium, though unable to follow his occupation of coalminer; during this period he was suffering from heavy night sweats. On admission he was running a temperature varying from 101°F. at night to 99° in the morning, which fell to normal in eight days following upon rest in bed and silence, and after that was never above the normal, his rectal temperature before rising averaging 97·7°. He had four ounces of sputum on admission containing tubercle bacilli. Physical examination revealed a condition of massive consolidation, apparently involving the whole of the left lung; there were also signs of softening at the right apex. He remained in the sanatorium five months, during which time he was able to do fairly heavy work in the garden, such as digging and wheeling barrows, without producing symptoms of auto-inoculation; he gained 19¼ lb. in weight, and looked and felt quite well. His sputum was reduced to two or three pieces, and bacilli were not found when last examined. The condition at the left side of the chest was practically unchanged; the lung was apparently quite solid from apex to base. He returned home on Jan. 13th, 1911, and worked in a factory until April, 1912. His lung, I believe, then broke down, and he died on June 5th, 1912.

The following is another example. The patient, a young man 20 years of age, was admitted on Sept. 9th, 1912, and discharged on Nov. 1st. The commencement was somewhat different from that in the last case. He described himself as having been quite well until April, 1912; just before this he had complained of a little cough and some weariness. He then went home for a week-end, and owing to the coal strike was compelled to walk eight miles; at the end of this walk he was completely done, and his mother informed me that when he reached home he looked like a corpse. He became delirious after the walk, and remembered nothing for a month; he was thought to have acute pneumonia, and had consolidation of the whole of the right lung. At the end of a month he began to improve, and was sent to the sanatorium some months later. On admission he was afebrile, the pulse was usually over 100, and respirations 24; his breath was rather short. His temperature remained normal until he had a dose of Spengler's I.K., 0·2 c.c. of 1 in 100,000, which immediately sent it up and increased his sputum and made him generally ill. The temperature fell immediately after another dose of 0·2 c.c. of 1 in 10,000,000. He then went home. On leaving, the right side of the chest was still quite solid. The sputum on admission and on discharge contained abundant tubercle bacilli. I saw his medical adviser three days ago, and he tells me that the patient is improving and that his pulse has dropped to 96.

I have at present in the sanatorium two similar cases. One of them is interesting from the retrospective standpoint, for in his case the pneumonic consolidation occurred ten years ago. At that time he was in bed three months and was off school 14 months. Since then he remained well until November, 1912, when he had a fresh outbreak. He was only admitted to the sanatorium on March 28th last, and his condition is quite good. The upper lobe on the left side shows extensive consolidation. Like the majority of these cases, he has very little sputum, but what there is is loaded with tubercle bacilli. As he has had a cough ever since his first attack, he would seem to have been very dangerous to his neighbours.

With regard to the above examples I should like to point out that both the two severe cases resulted from over-exertion in the early stage of pulmonary tuberculosis; secondly, that it was probably the massiveness of the consolidation which put a period to the acute symptoms, the massive consolidation greatly limiting movement, and at the same time greatly reducing the blood-supply. Furthermore, I am inclined to think that it is the massiveness of the consolidation which is the ultimate undoing of such cases. From experience I am led to believe that consolidation is the most difficult condition to cure of all the complications of phthisis, its seriousness depending on its extent. Where massive, tuberculin is unlikely to be of great benefit, though if given carelessly may well produce such a condition, for any immunity acquired by the administration of tuberculin is of necessity transitory, and efforts to break down and cause exfoliation of these masses are liable to produce calamitous results.

Personally, to me there seems no justification for giving

diagnostic injections of old tuberculin, for in any case a focal reaction, though it may indicate active disease, by no means indicates that the disease was active until the tuberculin was administered, and because a focal reaction is not discernible it does not follow that the patient is therefore well. This is well shown in the second case mentioned by Dr. Galbraith. Doubtful cases may either be treated on general lines or tuberculin administered, commencing with small doses and gradually increased. It is, of course, well to remember that solid lung may be due to the pneumococcus and may clear up after appropriate vaccine treatment.

I can confirm what Dr. Galbraith says about the value of whispering pectoriloquy in this condition; all the above cases exhibited this in a marked manner. In addition, both these bad cases had a peculiarly unwholesome smell which remained as long as they were under observation.

I am, Sir, yours faithfully,
EDWARD E. PREST.

Ayrshire Sanatorium, New Cumnock, April 5th, 1913.

INSANITY AND DIVORCE.

To the Editor of THE LANCET.

SIR,—With reference to the proposal that after a certain number of years' detention in an asylum insanity should form a plea for divorce, I would like to draw attention to a case in which recovery took place after 17 years' continuous residence.

A lady, aged 42, admitted March, 1896. Weight 7 st. Was in a condition of complete mental stupor, refusing to speak, eat, or make voluntary motion of any kind; catheter required to be passed, and bowels washed out by enemata. In May began to take food by herself; bowels and bladder acted normally. She was able to be up, but sat all day like a log, and was passively resistive.

In August underwent a course of thyroid treatment, but till October showed little or no change. She then began to improve in bodily health, though continuing dirty in her habits and persistently silent. At the end of 1898 had passed her climacteric; by this time she occasionally spoke a little, and she became much more correct in her habits. During the following ten years she slowly improved bodily and mentally, speaking freely, though in a somewhat childish manner, was able to do a little housework, sewing, &c., and by 1909 was to all appearances a typical case of mild terminative dementia. Weight 15 st. From this time, however, marked mental improvement took place. She gradually became active in mind and body, taking a keen interest in her own and outside affairs, and she was discharged recovered in March of this year.

I cannot see why insanity (unless wilfully concealed) should be pilloried as a plea for divorce more than any other illness, which is not directly due to evil living.

I am, Sir, yours faithfully,
J. BATTY TUKE, Jnr., M.D., F.R.C.P. Edin.

Polton, Midlothian, April 7th, 1913.

IODOFORM INJECTIONS IN PULMONARY TUBERCULOSIS.

To the Editor of THE LANCET.

SIR,—Some one has remarked that if all the remedies for tuberculosis were effectual it is difficult to understand why any person should die from it. Pending the establishment of a scientific basis for the therapeutics of this disease, I may, perhaps, be permitted to submit the results of my experience in six pulmonary cases treated by intravenous injections of iodoform. Of these cases one was acute, two advanced, and the remaining three early.

Of the advanced cases one died from intercurrent causes, the pulmonary symptoms having been considerably ameliorated. This case showed improvement in the physical signs in proportion to the dose and frequency of the iodoform administered. The acute case has, after 15 months' treatment, reached a condition of convalescence, tubercle bacilli are no longer to be found in the sputum, and there are no physical signs in the lungs. The remaining four cases show a regularly progressive improvement, and, in my opinion, are doing better than they would do under any other treatment that I know.

I am also using iodoform injections in a case of fœtid bronchitis in a man of 30, who before treatment expectorated daily about 10 oz. of stinking pus. After six weeks' treatment his expectoration has diminished by half, is clearer in colour, and free from smell.

I am, Sir, yours faithfully,
Bournemouth, March 25th, 1913. E. CURTIN.

THE WORKING OF THE NATIONAL INSURANCE ACT.

To the Editor of THE LANCET.

SIR,—The importance at the present stage of National Insurance to the medical profession of settling the question of certification, alluded to in a leading article last week, heard before Mr. Justice Bailache, is obvious. Instances can easily be imagined in which the point would arise. Counsel for the plaintiff, in the case on which the article was founded, suggested the example of a domestic servant in the house of an eminent physician who might well not be on the panel but who, equally reasonably, might be expected to attend his servant, and would certainly be medically qualified to give a certificate stating her incapacity and fitness for sick pay. There would also, no doubt, be cases which would tell the other way; for example, a medical man may be removed from a panel under Section 15, Subsection 2 B, of the Act, and no doubt the possibility of a sick insured person tendering the certificate of such a practitioner must be taken into consideration. Section 67 orders that "every dispute between an approved society, or a branch thereof, and an insured person who is a member of such society or branch relating to anything done or omitted by such person, society, or branch (as the case may be), under Part I. of the Act or any regulation made thereunder shall be decided in accordance with the rules of the society, but any party to any such dispute may in such cases and in such manner as may be prescribed appeal from such decision to the Insurance Commissioners." The Insurance Commissioners are, it may be noted, empowered to authorise referees to hear appeals or disputes submitted to them under this section, and there need be no delay in settling the case now at issue.

I am, Sir, yours faithfully,
April 7th, 1913. MEDICO-LEGAL.

THE POSITION OF ASSISTANT MEDICAL OFFICERS IN ASYLUMS.

To the Editor of THE LANCET.

SIR,—At the present time, owing to a dearth of suitable candidates for the posts of assistant medical officers in asylums, statements have been widely circulated that a term spent in that capacity forms one of the best experiences a man intending to enter general practice can have. It is true than men spending a short time in this way have succeeded conspicuously in other walks of the profession, but I think it is probably not because of this experience but in spite of it. Before taking this step a newly qualified man would be well advised to inquire into the conditions of the service. He will find that he is practically cut off from all surgical work, and to all intents and purposes from medical work of any importance perhaps for years. In nearly all asylums even a minor operation requiring an anæsthetic is performed by an outside surgeon specially employed. In all large asylums the junior man is given medical charge of patients that practically call for no medical attention whatever—viz., the demented class; and when one of these becomes so indisposed as to require medical attention to any extent the senior assistants take the case out of his hands into the infirmary. Even here a great lack of medical atmosphere is apparent as in few asylum infirmaries is there any trained nursing as ordinarily understood, attention being largely concentrated on cleanliness, feeding, and the prevention of injuries, all very necessary in their way, but falling far short of the keen clinician's ideas for the treatment of the sick. The junior assistant will find a great part of his time taken up with purely routine visits to his wards, writing more or less formal notes about the uneventful lives of dements, and endeavouring to get through a much too abundant monotonous and irksome leisure with such games as may be at hand, or at best a very uninspiring dalliance with a microscope. The fact is that men should only enter

the service, not as a training for wholly dissimilar work such as general practice, but with a view to making asylum work their career, and steps ought to be taken by the authorities to make it such. The large number of assistant medical officers in asylums with the extremely infrequent vacancies for superintendents leaves many an otherwise excellent medical man stranded, having had a training and environment for years almost completely out of sympathy with the rest of the profession and therefore greatly handicapped in taking his stand beside them if he gives up asylum work. Initial salaries should have little weight with intending candidates as subsequent advancement under present conditions is most uncertain, and indeed often a matter of luck.

I am, Sir, yours faithfully,

April 7th, 1913. REFORM.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

The late Mr. Jordan Lloyd.

THE death of Mr. Jordan Lloyd, joint professor of surgery in the University, senior surgeon to the Queen's Hospital and one of the best-known exponents of his science and art in our city, has been a source of real regret in all circles.

Hospital Saturday Fund.

The annual report states that the total receipts for last year amounted to £22,842 2*s.* 4*d.*—viz., £22,610 2*s.* 1*d.* collected in factories and other establishments and £232 0*s.* 3*d.* interest allowed by bankers. This total is £901 19*s.* 6*d.* in excess of the previous year's collection and constitutes another record. The number of contributing firms was 2190, a decrease of 34. £10,000 were voted for distribution among the medical institutions of the city towards the cost of their free work. At the convalescent home for men, Tyn-y-Coed, near Llandudno, 1245 patients were admitted, and at the women's convalescent home, Marle Hall, near Llandudno, 1446 patients were admitted. 632 children and 106 women entered the Red House, Great Barr. The total number of patients dealt with was 3429. Since the Fund's first convalescent home was established, 21 years ago, 44,770 patients have been received. The benefit that in this way has accrued, not only to the subscribers, but to the city at large, is incalculable. Through the surgical aid department 904 articles were supplied during the year. Through this department patients can obtain reliable articles at minimum prices and can pay for them by instalments. Rheumatic patients have been sent to St. John's Brine Baths Hospital at Droitwich. The Cook Memorial Sanatorium for Consumptives, erected by the Fund, will be opened during this summer, and part of the building will very shortly be available for men. The coming into force of the Insurance Act was a disturbing factor at certain works during the latter part of last year, but the great majority of contributing firms recognised that there was no valid reason why the contributions under the Act should interfere with the Hospital Saturday Fund, as the benefits offered are quite distinct. In nearly all cases where collections were temporarily suspended they have already been recommenced.

The Birmingham Insurance Committee.

The Local Medical Committee has now been approved by the Insurance Commissioners, and the Local Insurance Committee has been completed by the election of the medical members. Since the Act came into force 1036 completed applications for sanatorium benefit were received up to March 14th, and the expenditure amounted to £6404 17*s.* Of the 1036 applicants, 930 have been examined and 775 passed for treatment. There has been great difficulty with regard to sanatorium accommodation, but circumstances will be altered when the city sanatorium at Yardley-road is completed. Thirty beds will be available this month at Romsley Hill Sanatorium, and in six months' time 100 beds. The results of treatment appear to be satisfactory, in most cases the patients being able to return to work. After their stay in the sanatorium the patient's treatment is continued at the dispensary, and shelters were provided for suitable cases by the committee. About 80 patients have been treated in their homes. A small subcommittee has been appointed to make arrangements for the provision of domiciliary treatment, the supply of drugs, and for tuberculin required by general practitioners.

Birmingham and Midland Skin and Urinary Hospital.

According to the annual report, 276 in-patients were treated last year as compared with 185 the previous year; and 6663 out-patients, as compared with 6768. The expenditure exceeded income by £584 13*s.*, this being partly accounted for by an increase in the hospital's supply of radium. A special radium fund has been instituted for which donations are requested.

April 8th.

BRISTOL AND WESTERN COUNTIES.

(FROM OUR OWN CORRESPONDENTS.)

University of Bristol.

THE Bristol papers have published illustrations of the new buildings as they will appear when completed. The impression which these give is that the great tower will rather dwarf everything in its neighbourhood, but that it will at the same time be one of the finest pieces of modern architecture in the country. Certainly Bristol will be fortunate in adding so magnificent an adornment to her none too attractive streets. The controversy about the administration of the University drags its weary course along. Apparently Members of Parliament are accessible to those who are anxious to stir up trouble, for questions are being asked still in the House of Commons. The lecturer whose letters to the press are responsible for a prolongation of a controversy which would otherwise have died a natural death has been relieved of his duties during the coming summer term. He, however, claims the right of appearing before the council to defend himself.

Insurance Medical Service in Bristol.

The medical profession in Bristol has finally decided to continue the present panel service under the Insurance Act for the time being, instead of pressing for the changes contained in a scheme put forward by the Medical Federation, Limited.

Bristol Medical Dramatic Society.

A most successful week of performances has just come to a close. The society this year chose the *Manœuvres of Jane*, and though this was in some respects an ambitious flight, it was amply justified by the results. The cast was good throughout, though one or two familiar figures were missed, and the "houses" were most satisfactory. As usual, the performances were given at the All Saints' Hall.

The "Bristol Medico-Chirurgical Journal."

The March number of this quarterly journal is particularly interesting because it carries as frontispiece a portrait of Dr. R. Shingleton Smith, who retires from the editorship after 21 years of excellent service. His successor is Dr. P. Watson-Williams, who has had a long experience as assistant editor, a post now filled by Dr. J. A. Nixon, whose office as editorial secretary is in turn filled by Dr. J. M. Fortescue-Brickdale.

Bristol General Hospital.

The new wing, which is being built of reinforced concrete, is a source of considerable interest to Bristolians, who are not accustomed to this method. The new laundry is already in use, and it is probable that the opportunity afforded by all these changes for an extension of the pathological department will be seized without delay.

The Health of Torquay: Decrease of Vaccination.

The medical officer of health of Torquay, Dr. T. Dunlop, in his annual report for 1912 states that the birth-rate was 14·5 per 1000, the death-rate being 12·2 per 1000. Dr. Dunlop says that the district was formerly an exceptionally well-vaccinated one, but now it had become poorly vaccinated. The conscientious certificate exemptions in 1907 were 30, but in 1911 they numbered 230. He adds that if a small-pox epidemic should occur it will cost a considerable sum of money, and cause the district to be avoided by all who can afford to do so.

Taunton Rural District.

The medical officer of health of the Taunton rural district, Dr. H. J. Alford, in his annual report for 1912 states that

the death-rate was 11·7 per 1000. The birth-rate amounted to 15·4 per 1000. Infantile mortality was at the rate of 79·4 per 1000. During the year 43 notifications of infectious diseases were received, and of this number 14 were of pulmonary tuberculosis. Dr. Alford states that a tuberculosis dispensary has been opened at Taunton. In alluding to the danger of using milk from tuberculous cows, he says that the number of infected cows in the county of Somerset was very large, but no doubt much could be done by future legislation to counteract this evil.

Somerset Education Committee and the Dental Treatment of School Children.

At the last meeting of the Somerset education committee it was stated that it was practically impossible to get the school managers to grant a fixed sum for dental services for the school children, as out of 494 schools in Somerset only 94 had done so. It was decided that when the present temporary appointment of the dental surgeon had terminated he should be reappointed at a salary of £300 per annum, exclusive of travelling expenses.

Death of Dr. Herbert Stanley Jenkins.

News has been received of the death of Dr. Stanley Jenkins, a former Bristol student, who was distinguished not only by academic success, but also by personal charm. His death occurred at the early age of 38, at Sianfu, in Central China, where he was working as a medical missionary. Sianfu was a storm centre during the recent revolution, and though Dr. Jenkins escaped the perils that beset his colleagues owing to his absence on furlough, he was indirectly a victim of the same catastrophes; for the outbreak of typhus fever to which he apparently succumbed is no doubt traceable to the exhaustion of the city population by fire, sword, and famine. Another of his colleagues, Dr. Cecil F. Robertson, has been carried off by the same outbreak.

April 7th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

The "National Health Week."

THE "National Health Week" is being celebrated in Dublin by a Health and Housing Exhibition held in the gardens of the Rotunda Hospital. The exhibition was opened last Monday by His Excellency the Lord Lieutenant, and on Tuesday a lecture on "Food" was delivered by Professor W. H. Thompson. The housing section shows a number of model cottages suitable for country districts, and also exhibits plans and maps suggestive of improvements in town planning. There is a section for the treatment of the tuberculous, which contains a model tuberculosis dispensary and also a milk depôt with pasteurising plant. Another feature is a dental clinic, such as is suggested for primary schools. The management of the exhibition is in the hands of the Women's National Health Association. In various provincial towns "Health Week" is being observed by courses of lectures on health subjects.

Royal College of Physicians of Ireland.

At a meeting of the President and Fellows of the Royal College of Physicians of Ireland held on April 4th the following were duly elected Fellows of the College:—Mr. Albert Croly, Rathfarnham; Dr. Robert J. Rowlette, Dublin; and Captain W. Porter MacArthur, R.A.M.C.

The Certification Scheme.

The one topic of interest in medical circles in Ireland during the past week has been the scheme for medical certificates put forward by the Irish Insurance Commissioners. A meeting of the medical profession of Dublin was held on March 28th at the Royal College of Surgeons, and after heated discussion was adjourned to April 2nd. After further debate a resolution was passed rejecting as totally inadequate the terms offered by the Commissioners for certification, declining to join the panel unless and until the minimum terms agreed to at the general meeting of the profession in Ireland are conceded, and calling on all medical practitioners in the district to adhere to this resolution. Only some 11 medical men had at the time of the meeting put their names on the panel for the City of Dublin, though there are about 500 practitioners living in Dublin or its immediate neighbourhood. The attitude of medical men throughout the country is the same as that of their colleagues in Dublin. Only in three county boroughs and in two or three counties have the panels filled. The scheme of the Commissioners is, therefore, an almost unqualified failure, though they took extraordinary measures to gain acceptance for it. Not content with claiming without authority the approval of the Conjoint Committee and of the Insurance Committees, the Commissioners extended the time for going on the panels by a week, and the Medical Commissioners, by means of an interview with a representative of one of the morning papers, took especial pains to clear away certain misunderstandings which had naturally arisen from the slovenly drafting of the contract which medical men were asked to sign. At a meeting of the Poor-law Medical Officers' Subcommittee of the Irish Medical Association held in Dublin on April 3rd, resolutions were unanimously passed condemning the action of the Commissioners, and promising the strongest opposition.

Belfast Medical Men and Medical Benefit.

A very largely attended meeting of the medical practitioners of Belfast was held in the Medical Institute, Belfast, on April 2nd, Sir John W. Byers being in the chair. Mr. T. A. Davidson, who acted as convener, gave an account of the conference between the Conjoint Committee and the Treasury Medical Committee (THE LANCET, April 5th, p. 992) in regard to rates of remuneration under the proposed extension of medical benefits to the six Irish county boroughs. After a very full discussion the following resolutions were passed:—

1. That this meeting of medical practitioners resident within the county borough of Belfast approve of medical benefits under the National Insurance Act (1911) being extended to Ireland on the following terms: a capitation fee equal to that paid for insured persons in Great Britain—i.e., 7*s.* for each insured person per annum, including the treatment of tuberculosis, but excluding medicine and surgical appliances.
2. That this meeting of the medical practitioners in the county borough of Belfast are strongly opposed to treat dependents under the National Insurance Act.

It was also decided that the delegates appointed to represent the Belfast medical practitioners at the conference to be held in London should not agree to any other terms. Mr. Davidson and Dr. G. Elliott were appointed the representatives of the Belfast medical profession to the conference to be held in London with the Treasury Committee and the Friendly Societies. It appears now that there are in Belfast 143,000 insured persons.

Ulster Hospital for Women and Children, Belfast.

At the annual meeting of the supporters of this hospital held on April 3rd it was reported that during the past year there were 196 children, 89 women (gynæcological), and 2 women (maternity) admitted into the wards; while in the out-patient department 2363 (including 343 in the ophthalmic department) children, 680 women (gynæcological), and 270 women (maternity) were treated. Financially there was a balance in favour of the hospital of £63 11*s.* 7*d.*, which added to the balance from 1911 of £210 14*s.* 6*d.*, gives a balance forward to 1913 of £274 6*s.* 1*d.*

Liability of Consumptives.

At co. Monaghan quarter sessions on April 5th his honour Judge Johnston delivered judgment in a case of unusual interest which had been heard at the last sessions. A boarding-house keeper of Rostrevor, a health resort in co. Down, sued a merchant in Monaghan, executor of the will of a man, for injuries committed by that individual (deceased) when residing as a lodger in her house in June, 1912, the allegations being that he infected the house and furniture with a contagious disease—pulmonary tuberculosis. His Honour gave a decree for the full amount of the plaintiff's loss through the disinfection of the room and the destruction of some of the articles, and a further sum of £4 for the loss of lettings, making altogether £16 4*s.* 2*d.*

April 8th.

ROYAL METEOROLOGICAL SOCIETY.—The annual dinner of this society will be held on May 20th at the Trocadero Restaurant, Shaftesbury-avenue, Piccadilly Circus. All communications should be made to Mr. W. Marriott, Assistant Secretary, at 70, Victoria-street, London, S.W.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Tobacco Angina.

M. Fiessinger discussed before the Academy of Medicine on April 1st the part played by tobacco in the serious effects of angina pectoris. Certain anginal neuralgias are induced by tobacco, but they are benign in character and disappear with the removal of the toxic agent. In fatal cases syphilis must be held responsible. M. Fiessinger related three cases in which a positive Wassermann reaction led to mercurial treatment, which was followed by immediate improvement, after all other remedial measures had failed. The diagnosis of serious tobacco angina—*angine sclero-tabagique*, as Huchard called it—cannot be admitted unless syphilis has been previously excluded.

Biology and the Kinematograph.

At the Société de Physique M. Guillaume recently discussed the application of the kinematograph by Dr. Comandon, not merely for recording the movements of large organs, such as the heart, but also for following the life process up to its ultimate manifestations. By its means, he reminded his hearers, the circulation and the intimate mechanism of respiration can be demonstrated; the life phases of bacteria can be followed step by step, their mode of locomotion fathomed, and their struggle with the organism witnessed. By a retarded movement of the kinematograph, taking only one picture every minute, and then causing the film to rotate at the ordinary speed, the development of a seed, the growth of a flower, the metamorphoses of a larva, can be followed. The prospect is captivating, and the retarded kinematograph is undoubtedly a most useful means of instruction. Finally, a particular experiment in animal physiology can be made once for all, and where this can be done by means of the kinematograph the experiment can be repeatedly demonstrated to students.

Surgical Intervention in Tuberculosis Peritonitis.

M. Kirmisson considers surgical intervention indicated in certain cases of tuberculous peritonitis, in support of which view he cited many examples before the Société de Chirurgie on April 2nd. While performing a laparotomy in a case of intestinal occlusion he found, besides an intestine perforated by tuberculous nodules, two bands of adhesion which kept the intestine kinked. He divided them and kept the patient, who was cured, under observation for a year. This happened also in another case. At other times it was not bands but an agglutinated mass which caused the occlusion, and in such a case operation is ineffective, as he had found by trial. M. Léjars said that he had occasion to operate in a certain number of cases. In one case that presented all the signs of occlusion apparently connected with a tuberculous peritonitis, on opening the belly he found ascites with tuberculous vegetations and bands, which last he divided. The patient was cured. M. Léjars then recalled that there are in some forms of peritonitis pseudo-occlusions often simulating appendicitis. Merely opening the abdomen suffices to overcome such conditions, which are due only to acute localised peritonitis. Finally, M. Quénu added the testimony of cases from his own practice in support of surgical intervention.

Vaccination against Anthrax.

M. Roux has brought before the Académie des Sciences the results of the work of M. Declainche and M. Vallée, who for 12 years have been pursuing systematically the study of vaccination against anthrax, with the result that they have been able progressively to improve on the technique of their first operation. They have now made public a process that enables them to produce really attenuated strains of the bacillus anthracis, strains that it has hitherto been impossible to obtain. Vaccines prepared therefrom ensure, with a single vaccination and without any risk, the perfect immunisation of animals exposed to infection. As 345,000 cattle have been vaccinated by this method with complete success in the past three years, the authors consider the problem of vaccination against symptomatic anthrax definitively settled.

Impure Salt.

M. Andouard has been studying salt, which the bacteriologists consider a veritable hotbed of microbes of all kinds and a possible source of more or less severe infections. M. Andouard first showed that sea water near the shore, and consequently in the immediate vicinity of the salt-beds, contains considerable quantities of bacteria, of which the preliminary clarification beds favour the multiplication. This naturally is augmented by the raking of the beds with unclean instruments and the feet of the waders. The grey salt used for cooking and baking is of this kind. The fine salt is less rich in harmful germs, though not entirely exempt. In spite of the re-dissolving and clarification of the fresh liquid and the action of heat to induce a recrystallisation, there still remain about 2400 microbic colonies to the gramme of white salt. On a ham cured in salt liquor, M. Van Ermengem found the bacillus botulinus, a cause of very grave intoxications. M. Andouard concludes from his observations that sal t is a substance more or less impure from both the chemical and the bacteriological points of view, and that serious measures are called for refining, sterilisation, and clean packing—to put an end to the disorders that may be caused by this product.

April 7th.

NOTES FROM INDIA.

(FROM OUR OWN CORRESPONDENTS.)

The Calcutta Swamp.

THE state of the Calcutta streets during rain recalls the fact that the city was built upon a swamp, and is consequently condemned to suffer whenever a few inches of rain fall. In the monsoon the subsoil water is but a few inches from the surface, and the only means of remedying the effect of the excess of water from below and above would be an unusually extensive drainage scheme. The chief engineer has shown in the course of a lengthy note how the existing drainage of Calcutta has become too small for the work forced upon it by the growth of the city. The remedy is obvious, but the means of carrying it out by no means springs so readily to the eye.

Physique of Educated Indians.

An article appears in the February *Wednesday Review* from the pen of the Hon. Dr. T. N. Nair on the Physical Degeneration of the Educated Indian. Dr. Nair attributes this degeneration to early marriage, malnutrition, injurious environment, and overstudy, and advocates medical inspection and feeding by the State of all school children.

The Supply of Hospital Nurses in India.

The report of the Lady Minto Nursing Association, which shows that the association is continuing and gradually extending its sphere of usefulness, has just been issued. During the year the nursing sisters throughout India attended some 514 cases, 309 of which were medical, 68 being cases of enteric fever, 96 maternity cases, and 40 infectious cases. 138 applications for nurses had to be refused owing to no nurse being available. The highest number of cases attended in any previous year was 477 in 1910. During 1912 the number of non-subscribers' cases attended was 184, and the fees realised from these cases amounted to Rs. 17,166. The total subscriptions received during the year amounted to Rs. 38,730, and the total fees to Rs. 48,104, there being in all 1608 subscribers. During the year 10 nurses were sent out to India, all except 2 of them having received their training at London hospitals.

Dr. T. F. Pearse, late Medical Officer of Calcutta.

Dr. Pearse, having retired from his post as medical officer of health of Calcutta, is leaving here and will arrive home probably about the end of May. At a special meeting of the Calcutta Corporation, held at the Central Office on March 5th, a resolution was passed placing on record its high appreciation of the services which Dr. Pearse had rendered to the city and expressing its regret that reasons of health had rendered his resignation necessary. Dr. Pearse, who has been connected with the Calcutta Corporation for 15 years, has been its health officer for six years, and has done excellent work during his term of office.

King George V. Anti-Tuberculosis League, Bombay.

This League, which, under the presidency of Lord Sydenham, the Governor of Bombay, and a distinguished committee, was formed to commemorate the Coronation Durbar and the

visit of their Imperial Majesties, the King Emperor and Queen Empress, to this country, has issued a plan of campaign and made an earnest appeal for contributions. The plan of campaign includes the notification of the disease, the establishment of tuberculosis dispensaries, the education of the people, the medical inspection of school children, the supervision of milk and food supplies, and the general relief of distress caused by the bread-winner of a family developing consumption. The scheme is therefore a very comprehensive one and if it can live up to its programme should materially benefit the province, especially as it is the intention of the league to emphasise the importance of the establishment of hospitals for advanced cases, of sanatoriums and farm colonies, of open-air schools and homes for cripples, and the segregation of infected purdah women in suitable institutions, these institutions being provided for and maintained by municipal bodies or outside philanthropic agencies with or without Government aid. Towards the general scheme Mr. Ratan Tate has promised to contribute Rs. 1,50,000, the Government of Bombay an annual donation of Rs. 19,000 for three years, and the municipal corporation of Bombay has sanctioned a similar amount for the same period, while several commercial firms have promised assistance. It has also been arranged that there should be an enrolled list of annual members and life members paying a subscription of Rs. 5 and Rs. 100 respectively. Dr. J. A. Turner and Dr. N. H. Choksy are the honorary secretaries.

King Edward VII. Memorial Sanatorium at Lotni, Bhawali, Naini Tal District.

Major A. W. Cochrane, I.M.S., the superintendent of the sanatorium which was raised as a memorial to the late King by the people of the United Provinces, has issued his report for 1912. Up to Dec. 31st 54 patients were admitted, comprising 45 males and 9 females, the percentage of those giving a history of tuberculous lung disease in near relatives being 55 per cent. Of 36 patients who left the sanatorium during the year the average stated length of illness before admission was 388 days. The average stay of the patients in the sanatorium was 81·44, the maximum being 183 and the minimum 17 days. The result of the treatment, not including 6 cases which stayed less than 1 month, was as follows: in the first and second stages (11 cases) no deaths, 1 not improved, 1 improved, 2 much improved, and 7 disease arrested. In stage three (19 cases) 1 died, 5 not improved, 4 improved, 5 much improved, and 4 disease arrested. This gives 63·63 per cent. of cases of arrested disease in stages 1 and 2 and 21·05 per cent. in stage 3.

The Viceregal Lodge Fund for the Turkish Army.

A sum of Rs. 21,842–7–3 was sent to Constantinople on behalf of Her Excellency Lady Hardinge's Fund for the relief of the women and children of Turkish killed and wounded. This sum has now reached its destination, and, with the permission of Her Excellency, has been added to Lady Lowther's Fund, which deals with the absolutely destitute women and children who have lost their all owing to the war. There are at present 15,000 refugees entirely dependent on Lady Lowther's Fund, of whom 6000 are the families of the Turkish soldiers—dead, wounded, or lost—and it is for the maintenance of these that Lady Hardinge's Fund has been utilised. The Turkish Government has in most cases been able to provide housing for them, but they are entirely dependent on charity, I understand, for all the other necessaries of life. They are now being supplied from the Fund with bread, charcoal, bedding, and garments, and in some cases with milk, rice, medicine, and beans.

The Ghent Exhibition.

Surgeon-General Sir A. M. Branfoot will represent the Government of India at the Ghent International Exhibition of Tropical Diseases, which has been fixed for the spring. Exhibits relating to malaria, kala-azar, cholera, and smallpox are being collected for inclusion in the British collection for the Exhibition.

Bangalore Improvements.

As a result of the inspection late last year by Major J. C. Robertson, I.M.S., of the sanitary requirements of the civil and military station of Bangalore, the Government of India have now sanctioned a special grant of four lakhs of rupees (£25,000 sterling) to be expended exclusively on sanitation. This will include further relief of congestion in the general bazaar by the demolition of insanitary dwellings, compensation for road opening, and new tenement extensions.

Plague at Jhelum.

Plague has broken out in the city of Jhelum. During the last few days about half a dozen men were taken ill, and all of them succumbed to the disease. At first the disease remained confined to the upper part of the city, but now it is spreading to the other parts. The first case took place in the sweepers' huts, but now it has extended further. Dead rats are being thrown into the streets by the people, a practice that should be stopped at once. In consequence of this outbreak the Jhelum cantonment is placed out of bounds.

The Dangers of Petrol.

An unfortunate accident illustrating the danger of using petrol for cleaning purposes occurred in Lahore recently. A lady had cleaned a pair of gloves with petrol early one morning, and after doing so hung the gloves up in the verandah. In the afternoon when going out she put on the gloves, and was just leaving her drawing-room when she noticed that the fire needed attention. She picked up the poker and stirred the fire, when her gloves suddenly burst into flames. She had the presence of mind to thrust her hands under a heavy rug which was handy, but both hands being burnt she was unable to press the rug down on them. It was some time before the flames were extinguished, and the lady's arms were severely burned. It is worth while to call attention to this case because there is a very general impression that the small amount of petrol used for glove-cleaning, &c., evaporates rapidly, and that a very brief time is sufficient to prevent all possibility of danger. In this case the gloves had been hanging for several hours in the open air before they were used, but enough petrol remained in them to cause a serious accident.

The Madras Water-supply.

The Government of India has submitted for sanction to the Secretary of State a project for a reservoir connected with the Madras water-supply which is estimated to cost 20¼ lakhs of rupees.

Karachi's Water-supply.

In a recent report the chief engineer of the Karachi municipality shows that for an expenditure of about 6 lakhs of rupees he can provide for all the reasonable requirements of Karachi for the next ten years. For the more distant future there is a project for damming the river Malir about 29 miles away, which will guarantee a practically unlimited and inexhaustive supply. It remains for the municipality to deal with the financial aspects of the situation.

March 14th.

AUSTRALIA.

(FROM OUR OWN CORRESPONDENT.)

Health of the Australian Navy.

THE report for last year states the strength of the navy at 14 vessels, carrying 3450 men. The number of cases of disease and injury entered on the sick list was 2691, which was an increase of nearly 50 per cent. on the average for the previous five years. The invalidings numbered 56. There were 13 deaths. The average number of daily sick was 80·7. The increase in the sick list was due to minor ailments, and the venereal statistics were said to be satisfactory.

Maternity Bonus.

The Commonwealth maternity bonus has now become very generally claimed, and it is estimated that the first year's payments will total over £600,000. The first prosecution for making a false return was heard in Victoria, and the accused woman was fined £10 and ordered to return the amount of the bonus. The mother had obtained it by forging the nurse's signature.

New South Wales Public Health Department.

Dr. J. Ashburton Thompson has retired from the position of principal Government medical officer and President of the Board of Health. Dr. Thompson has done good work during his occupancy, and is recognised as a leading authority on leprosy and bubonic plague. It was owing to his work in Sydney that bubonic plague became definitely recognised as a disease of rats, and probably conveyed to man by means

of fleas. His retirement will be made the occasion of a rearrangement of the work of the department. The position of Government medical officer will be taken by Dr. C. Paton. At present there are three separate departments of microbiology, public health, and hospitals and charities. It is proposed to amalgamate these under one head. The medical inspection of schools will be made a separate department. Dr. F. Tidswell has resigned his position as director of the Bureau of Microbiology.

Australian Association for the Advancement of Science.

The section of sanitary science and hygiene at the recent Congress of the Australian Association for the Advancement of Science recommended :—

That a sanitary committee be formed to report on the sanitary control of small towns and rural districts; that medical officers of health should have special qualifications in public health, and should be whole-time officers; that whole-time certificated sanitary inspectors should be appointed; that a separate chair or lectureship in hygiene and sanitary science be established in each medical school; that the Governments of Australia and New Zealand be asked to hold a conference of chief medical and veterinary officers to discuss uniform measures for control of tuberculosis in cattle and pigs.

Insane Immigrants.

The Inspector-General of Insane for Victoria (Mr. J. Jones) has drawn attention to the number of immigrants received into the lunatic asylums, a feature which has been noted also in America. Mr. Jones has been asked by the Government to furnish exact information on the subject.

Medical Inspection of School Children.

The report of the Victorian school medical inspectors states, *inter alia* :—

The feeble-minded are 1 per cent. or more of our school children. Over 900 children worthy of special investigation in this particular are in Melbourne, and Victoria is about to make its beginning in the work this year. Nothing exists for the others; yet malnutrition occurs in anything from 5 per cent. upwards, left-handers from 3 per cent. of children, stutterers and stammerers about 4 or 5 per cent.—i.e. in Victoria 6000 and 10,000 children respectively. No attempt has yet been made to fit our educational methods to these children. A large percentage—26 per cent., or one-quarter—of the children examined showed structural bone alterations and other indications of rickets. The figures for defects roughly correspond with those of previous reports, confirming, in the strongest fashion, the statement that a gross amount of previously unrecognised defect and disease occurs in our schools. The number now examined in the elementary schools is about 17,000; thus the possibility that any errors have arisen from the occurrence of chance bad patches is removed. One-seventh of all children show visual defect; one-fifth, deafness; one-quarter, nose and throat defect (post-nasal growths and enlarged tonsils); and one-half, serious degrees of dental defect. Deformities of marked degree of chest, shoulders, and spine are common. Visceral disease (heart and lung disease) are also found. The former is usually in the form of leakage at the heart valves, either existent at birth or acquired, a condition shortening life and debarring from life insurance, and is constantly found in 1 to 2½ per cent. of children. Lung trouble, usually tuberculosis, is, however, only occasionally seen. Anæmia, as shown by distinct pallor and malnutrition, is as frequent in boys as in girls, or more so, though this is reversed in high-school pupils. Skin affections, chiefly due to parasitic infections, such as scabies and ringworm, also occasionally occur. Scabies, or the itch, would appear to be a legacy from the South African war, having been brought back, it is said, by our returning contingents. It is certain, at any rate, that its appearance in Victoria was very rare before 1902, but since then it has been noted more and more frequently, and seems now endemic.

Vital Statistics of Victoria.

The report for 1912 of the Government statistician states :—

The number of marriages—11,738—exceeded by 650 the total for the preceding year, and the resulting marriage rate—8·66 per 1000 of population—was the highest experienced in the State for 52 years. The births numbered 35,817, of which 16,879 occurred in Greater Melbourne. The numbers exceeded by 2773 and 2316 respectively the corresponding totals for the previous year. The birth-rate for the State—26·43 per 1000 of population—was the best for the past 15 years. The improvement in the birth-rate corresponds fairly closely with the increase in the marriage-rate in recent years. The deaths for the State were 16,595, or 1378 more, and those for Melbourne and suburbs were 8622, or 1007 more than in the previous year. The metropolitan death-rate was the highest for nine years. The deaths of children under one year of age numbered 2669 for the whole State, and 1523 for the metropolis, as compared with 2270 and 1139 respectively in 1911. There was a fairly large reduction in the death-rate from tubercular diseases, and a very marked increase in that from cancer. The former accounted for 1296, and the latter for 1225 deaths, as against 1354 and 1100 respectively in the preceding year. A heavy death-rate from diphtheria prevailed in both town and country in each of the past two years. The excess of births over deaths amounted to 19,222, as compared with 17,927 in 1911.

A Large Family.

A woman at Katoomba, New South Wales, recently registered the birth of her twenty-fifth child. She walked a distance of three miles to the registrar's office, carrying the child, on the fifth day after its birth.

Personal.

Professor H. B. Allen has returned to Melbourne after an extended holiday in Great Britain and Europe, and resumed his duties at the University.—Dr. G. Rothwell W. Adams has resigned his position as surgeon to the Women's Hospital, Melbourne, after holding it for a period of 25 years. Dr. Adams is lecturer on obstetrics and gynæcology in the University of Melbourne.—Dr. G. C. McK. Mathison, a Melbourne graduate, who has for some years been engaged in research work at the Lister Institute, will return to take up a position at the Melbourne Hospital in August next.

March 8th.

Obituary.

SAMSON GEMMELL, M.D., C.M. GLASG., F.R.F.P. & S. GLASG.,

PROFESSOR OF THE PRACTICE OF MEDICINE IN THE UNIVERSITY OF GLASGOW; PHYSICIAN TO THE WESTERN INFIRMARY AND CHILDREN'S HOSPITAL, GLASGOW.

THE medical profession and the general public of Glasgow and the West of Scotland have suffered a great loss in the death of Professor Samson Gemmell, of the chair of Practice of Medicine in the University of Glasgow. Dr. Gemmell was apparently in good health up to a few hours before the sad occurrence, which took place at his residence, 17, Woodside-place, on April 4th. At the beginning of the week he presided at the meeting of examiners for the final examination in medicine at the University. On the day of his death he paid his customary visit to the Western Infirmary, and there were no indications of approaching illness at that time. Three hours after leaving the infirmary he became unwell, and expired in his own house before medical assistance could be rendered. Death was due to heart failure.

Dr. Gemmell was born in 1848 in Catrine, Ayrshire. He studied medicine in the University of Glasgow, where he graduated M.B., C.M. with honours in 1872 and M.D. in 1880. In 1880 he also became a Fellow of the Faculty of Physicians and Surgeons of Glasgow. After completing his medical curriculum he became a resident physician in the Royal Infirmary, and also acted for a short period as demonstrator of anatomy. He then became medical superintendent of the City of Glasgow Fever Hospital, after which he started in consulting practice. He was appointed assistant to the professor of medicine in the University, a post which he held till 1880, when he was appointed to the chair of practice of medicine in Anderson's College Medical School. In the year 1900 Professor McCall Anderson was transferred from the chair of clinical medicine to that of practice of medicine in the University, and Dr. Gemmell was appointed by the University Court to the chair of clinical medicine. He held that chair till 1908, when on the death of Sir Thomas McCall Anderson he was appointed by the Crown to the chair of practice of medicine, which he has since held. Dr. Gemmell in the early stages of his career was a dispensary physician in the Western Infirmary. In 1886 he was appointed physician to the Royal Hospital for Sick Children, and in 1887 physician to the Royal Infirmary. From the latter post he was transferred in 1894 to the Western Infirmary. During his life he built up in Glasgow a great reputation as a teacher and a medical consultant. He was admired and respected by all for his medical knowledge, his sound judgment, and his intellectual honesty, and his kindness of heart and friendly interest endeared him to all who came in contact with him.

Dr. Gemmell was a sparing writer, and contributed little to medical literature. Early in his teaching career he wrote an excellent chapter on Physical Diagnosis of Diseases of the Chest and Abdomen for the second edition of Finlayson's Clinical Manual; but this was almost his only published work.

Dr. William R. Jack sends the following appreciation : "By the death of Professor Samson Gemmell the University and the medical profession of Glasgow have lost one of their most striking personalities. He was the last of an epoch; a man in whom were all the virtues of the older school of medicine, based upon wide clinical experience and a quick insight into the nature of disease. He was not neglectful of

detail, but he had the happy faculty of selecting from among the details of a case the points which were most essential to its comprehension, and of so emphasising these in his demonstration of it that the malady formed a picture not soon to be obliterated from the recollection of his hearers. In his systematic lectures his method was the same, but it was at the sick bed, where his students were closely gathered round him, that it was seen to its fullest advantage, and that his graphic and incisive eloquence most firmly riveted their attention. They played no mere passive part in his demonstrations. His penetrating questions and his caustic comments, if they caused dismay among the laggards, yet spurred the better men to the best that was in them. His hold upon his auditors was strengthened by the fact that he had no more mercy for his own errors than for theirs. Where his diagnosis had been at fault he never sought to hide or palliate the mistake; rather he insisted upon its lessons both for himself and for his students. His personality was masterful, and though his criticism might at times be harsh, those who knew him knew that it was equal, and that he had not two measures. Such honesty, coupled with such diagnostic skill, soon commanded confidence, and at the time of his death he had the largest consulting practice in the West of Scotland. It contributed to this result that he was intensely human, that a patient was to him no mere diagnostic problem but a piece of suffering humanity whose weakness might lean upon his strength. In his wards, as in private, his patients drew vitality from him, and to young and old he was alike a friend. The characteristics thus briefly indicated distinguished him in private as in his professional career. He was a man of wide reading and broad culture, to whom, though when he pleased there could be no more charming companion, a book was as much a friend as a person. He had strong opinions, and he was fearless of criticism. He was outspoken in advocacy, as in condemnation; if he made enemies he had also firm friends, loyal to him as he was loyal to them. He hated anything mean, and cant was the chief object of his hatred. The generations of students who came under his influence learned from him not medicine only, but straightforwardness, courage, and fidelity to truth."

JORDAN LLOYD, M.S. DURH., M.D., M.SC. BIRM., F.R.C.S. ENG.,

PROFESSOR OF SURGERY IN THE UNIVERSITY OF BIRMINGHAM; SENIOR SURGEON TO QUEEN'S HOSPITAL, BIRMINGHAM.

WE regret to record the death on April 4th of Professor Jordan Lloyd, the eminent Birmingham surgeon. He died—as he would have wished to die—in harness, for his fatal attack of angina pectoris came on after a morning's operation at Queen's Hospital. His loss will be widely felt in Birmingham and throughout the Midlands.

Jordan Lloyd was born in Birmingham in 1853. He was educated professionally at the old medical school of Queen's College, Birmingham, and at the University of Durham. After qualifying at the Society of Apothecaries in 1877 he obtained the Membership of the Royal College of Surgeons of England in the following year, and the Fellowship two years later, when he also took the M.B. and M.S. degrees of the University of Durham. Shortly after the foundation in 1900 of the University of Birmingham Mr. Jordan Lloyd received the degrees of M.B., B.Ch., and M.Sc. from that body, and in 1904 the M.D. degree of Birmingham was conferred upon him.

His long connexion with the visiting staff of Queen's Hospital began at the end of 1880, when he was appointed casualty surgeon. Two years later he was promoted to be surgeon, and this post he held with distinction for the remaining 30 years of his life. During this time he steadily built up a high reputation as an operative surgeon and as a teacher, and his appointment as co-professor of surgery in the university of his native city was a well-deserved honour. From 1883 onwards Mr. Jordan Lloyd wrote frequently on surgical subjects, and between 1887 and 1897—the years of his greatest literary activity—numerous papers from his pen were published in THE LANCET. Besides his appointment at Queen's Hospital Mr. Jordan Lloyd was consulting surgeon to a number of local institutions. He was a justice of the peace for the city of Birmingham, a lieutenant-colonel in the Royal Army Medical Corps, Territorial Force, and officer commanding the 1st Southern General Hospital, South Midland Division.

Professor Robert Saundby sends the following appreciation: "I have known Mr. Jordan Lloyd since he came to the General Hospital as resident surgical assistant in 1876. I was much impressed by the ability he displayed, and I had some conversation with him about his education, urging him to try for higher qualifications, as he had not entered for the first Fellowship or the London M.B. He told me his father thought it was unnecessary, and as it was his intention to join his father's practice he should only try for the ordinary diplomas. However, his own and probably his father's views became modified by his wonderful success as a student, and he was undoubtedly encouraged greatly by his teachers, the late Mr. Sampson Gamgee, by Mr. J. Furneaux Jordan, to both of whom he always expressed himself as owing much, and by Mr. Lawson Tait, who early appreciated his surgical talent. I watched his progress with sympathy, and although others better qualified can express what was thought of his originality and skill as a surgeon, I saw enough to show me that he stood in the front rank as an operator, bold in resource and marvellously capable of carrying out his carefully devised plans. His almost boyish enthusiasm for his work lasted throughout, and enabled him to overcome the disadvantages of a frame never robust and of the ill-health that weighed him down during recent years. He was a charming speaker, with something to say that was always fresh, and no man enjoyed greater popularity as a teacher and consultant; in both these capacities he will be greatly missed. He was of a singularly affectionate disposition and possessed a winning manner which gained him many friends and softened his relations with those who at times differed from him in policy. His domestic life was especially happy. His last words were highly characteristic of the man: 'What shall I do? I shall have to give up my work.' He lived for his work; he could not take holidays; when he went away he fidgeted all the time and wished himself back at work. Although he had been warned of the dangerous nature of his recent attacks he would not reduce his work. He did four or five operations on the Friday morning, and unfortunately one of the patients, a child, stopped breathing. He performed artificial respiration himself, and had the satisfaction of seeing it recover, but it is only too probable that he gave his own life in exchange. He drove home in a cab, but on arrival he collapsed. He lay down on the hearth-rug in front of the dining-room fire and had a terrible anginal attack which was relieved by amyl nitrite. He sat on the sofa, but after a short interval he complained of a return of the pain, drew two or three deep breaths, and died before medical assistance had arrived."

Professor Gilbert Barling writes:—"Mr. Jordan Lloyd was a very brilliant surgeon, especially as a manipulator—bold, quick, and very ready in any difficulties. He had above all things a most keen and vivid interest in his work. It was not merely a matter of earning an income or holding an office. The study of disease in itself and the opportunity to relieve it was to him a real gratification and an ever-present interest. He was a very fine teacher and lecturer, and the address in Surgery which he gave at the meeting of the British Medical Association in Birmingham in 1911 was a brilliant performance. In his earlier days, when, of course, he had more leisure, he made a number of interesting inquiries and researches into various forms of surgical disease, and the papers he wrote at that time are still quoted as authoritative on the conditions of which they treated. It has been a matter of great regret to his friends and colleagues during the last few years that his health has seemed to be rather strained, and that he was not always able to do himself full justice. He will be long and affectionately remembered as a brilliant son of the Birmingham School of Medicine."

ALFRED CHUNE FLETCHER, M.R.C.S. ENG.

THE death has been announced of Alfred Chune Fletcher, surgeon to the Charterhouse, which occurred on March 30th. A large circle of friends and patients have learned the fact with great concern.

Alfred Chune Fletcher started life as a journalist, and his language, written or spoken, was always so selected, lucid, and to the point, that his literary training might have been guessed. He did his student's work at St. Bartholomew's Hospital in the late "seventies," and was house surgeon to Sir William Savory in 1881–2. He was well equipped in all branches of his profession, his thoroughness and close attention to details being combined with a

keen therapeutic instinct. His practice was large outside his constant duties at the Charterhouse and the Merchant Taylors' School, where his straightforward and sympathetic manner won for him complete confidence, and he was concerned with many important patients. He was able to convey the true impression of his one object—which was to do all that was possible for the best interest of the patient. He thus represented in the eyes of those who knew him a typical picture of a sagacious practitioner.

"I shall be glad," writes a correspondent, who desires to remain anonymous, "if you will allow me to place on record a recognition of Mr. Fletcher's admirable qualities as resident medical officer at the Charterhouse, a position in which he was not only medical adviser to some 60 or so old men, often troubled with ill health, but also their official superior, and at the same time head of a medical service which embraces a fair number of nurses. Over all these people he might have ruled with sternness, but he appears invariably to have been gentle and most considerate, rendering many an act of kindness, and careful to spare with a gentleman-like instinct that does him honour the self-respect of the poor men subjected to his rule. The result, so I find, is, both among pensioners and among nurses, a high regard for his memory, genuine sympathy with his family, and gratitude that should stand for something when the great account comes to be cast up:—

Qui bene fecerunt, illi sua facta sequuntur."

Mr. Fletcher leaves behind him a wife, who has long been an invalid, and three daughters, two of whom are married.

GEORGE TEMPLETON, M.B., C.M. EDIN., F.R.C.S. ENG.

THE tragic death last week of Mr. George Templeton at the early age of 41 while ski-ing in Norway removes a prominent man from the list of the younger surgeons practising in London.

He was a native of Kilmarnock, and when quite a boy proceeded to Edinburgh University and attended all the necessary classes for qualification a year before the legal age for taking the University degree. In 1892 he graduated M.B., C.M. Edin. (with honours), and the same year took the English qualifications of M.R.C.S. and L.R.C.P., taking in 1896 also the surgical Fellowship. For some time he held the appointment of surgeon to the North-West London Hospital. As surgeon to St. Barnabas Home, Lloyd-square, he did excellent work, and his charitable labours there will be long remembered with grateful affection. He kept abreast of all the advances in modern surgery, and devoted considerable time to the study of general science and literature. He was a very proficient linguist, speaking German, French, and Italian fluently, and knowing something of other European languages, while he was passionately fond of music and played various instruments.

Mr. Templeton had a strong physique and was very fond of all outdoor exercises. Not long since he walked round the island of Arran, a distance of 60 miles, in one day. His death has come as a severe loss to many friends and patients.

HERBERT McDONALD PHILLPOTTS, L.R.C.P. LOND., M.R.C.S. ENG.

Mr. Herbert Phillpotts, who died at Nice on March 20th in his forty-eighth year, was educated at Plymouth and King's College School, London, and St. Mary's Hospital, and qualified L.R.C.P. and M.R.C.S. in 1890. He was a keen sportsman and had travelled considerably, though he was as devoted to Dartmoor as is his brother, Mr. Eden Phillpotts, the well-known author. The deceased was at one time surgeon to the Dartmouth and Kingswear Cottage Hospital, but had recently left Kingswear and taken up his residence at Paignton. Mr. Phillpotts had many friends in Devon, and much regret is felt there at his early death.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent foreign medical men are announced:—Dr. Paul Ascherson, extraordinary professor of botany in the University of Berlin, aged 78. In early life he had been a general practitioner, but lately had devoted himself entirely to botanical studies.—Dr. E. Schiff, *docent* of dermatology in the University of Vienna.—Dr. Alfred Genzmer, extraordinary professor of surgery in the University of Halle.—Dr. Arnold Heller, professor of pathological anatomy in the University of Kiel.

THE NATIONAL INSURANCE ACT.

THE INSURANCE ACT AND THE SUPPLY OF DRUGS.

MEDICAL benefit under the Insurance Act has now been in operation for a sufficient time to make it possible to form an idea of the effect of the Act upon the business of pharmacy. Especially in industrial centres, where such a large proportion of the population belongs to the insured class, the administration of medical benefit has brought about a great change in the character of the chemist's business, and there are indications that in course of time much of the exotic paraphernalia of pharmacy will disappear and the chemist's shop will become less of a general store and more of a place where pharmacy is practised. Already there has been a noticeable decrease in the sale of proprietary medicines and in "counter prescribing," and as time goes on the decrease will no doubt become more pronounced. Three months' experience has demonstrated that the extra work which has been thrown upon the chemist is hardly compensated by the remuneration. Except from Scotland, however, there have been few complaints concerning the rate of payment for drugs and dispensing, and it may be assumed that pharmacists are, on the whole, disposed to put on the credit side of the account the improvement in the character of their work, which has been one of the results of the operation of the Act. In Scotland the matter is not regarded in the same light, for while a fair proportion of the work of the Scottish pharmacist has always consisted of the compounding of prescriptions, this was hardly the case in England prior to the coming into operation of medical benefit. This difference is, in fact, emphasised by a representative body of Scottish pharmacists in a statement, which prefaces a demand for higher rates of payment for insurance work, wherein it is set forth that "while the English chemist has by means of the Insurance Act gained a considerable addition to his regular business, the Scottish chemist has seen a large number of his private clients brought under the Act, and as they now have their medicine supplied at the contract prices, he may fairly be considered to be a loser to the extent of the difference." From England and Wales, however, there appears to have been no expression of widespread discontent, but slightly improved terms have been embodied in the tariff of charges which form the basis of the new contract between pharmacists and Local Insurance Committees, beginning on April 15th. The principle upon which the tariff is based is the same as in Germany, a charge being made for each ingredient, according to its quantity and value, and a very modest additional fee for the time and skill required for dispensing. There are but few changes in the prices of the new tariff, and even in the aggregate they would amount to an almost negligible sum. For copying prescriptions the proposed remuneration is 1*d.* each, which can hardly be regarded as extravagant in view of the clerical work entailed. As to how far it will be found necessary to encroach upon the Drug Suspense Fund there are at present no means of making a fair estimate, but in Scotland, from calculations which have beeen made, it is considered that in many districts the drug bill will not swallow up the whole of the ordinary drug fund, in which case there would be no encroachment upon the floating 6*d.*

MIDDLESEX INSURANCE COMMITTEE.

The Middlesex Insurance Committee on April 7th had under consideration a letter from Mr. F. W. James, stating that at a meeting of the Non-Panel Doctors' Association, to which every qualified practitioner in Ealing whose name did not appear on the Middlesex panel was invited, it was decided to decline an offer of the Insurance Committee to allow medical men in Ealing to place their names on the panel for a limited class or number of insured persons. The association offered instead to establish a public medical service on the lines of the Ealing scheme, with no wage-limit other than that in the Act. Payment would be made out of a pool, not by capitation, but on a scale of fees for services rendered. The General Purposes Subcommittee recommended that the proposed service be not approved, and that full power be delegated to the subcommittee to deal—after consultation with the Insurance Commissioners—

with any situation that might arise in the Ealing district after April 15th.

Mr. W. S. GLYN-JONES, M.P. (the Chairman), suggested that this proposal should be modified by the addition of the words :—

Provided that if the subcommittee recommend the appointment of a full-time officer or officers, a special meeting of the Insurance Committee will be summoned to confirm such resolution.

On a division, however, it was decided to omit the suggested additional clause on the ground that it would weaken the position of the committee in dealing with the situation in Ealing.

It was stated that the number of doctors on the panel in Middlesex was 520, and that 445 had signed renewal agreements. There were 347 chemists, and 305 had signed renewal agreements. Of 313,809 insured persons, 218,151 had selected their doctors.

LONDON INSURANCE COMMITTEE.

Some debate occurred at the meeting of the London Insurance Committee on April 3rd upon the following motion :—

That it be referred to the Medical Benefit Subcommittee to consider and report whether the present system of medical benefit provided under the Insurance Act, to insured persons in London, can be improved, and if so, to submit recommendations to give effect to their suggestions.

Mr. F. HARRIS, who moved the resolution, remarked that whereas prior to January last there were 1500 medical men engaged in contract practice, there were now 1258 medical men attending insured persons, who probably outnumbered by four to one those previously treated on a contract basis. He saw no reason to believe that the number of doctors on the panel would be greatly increased at the end of the first quarter. As there must be about 3000 medical men in London available for the treatment of insured persons, he urged that the question should be considered whether a conference with the medical profession would be useful in furthering the objects the Committee had in view.

Mr. E. B. TURNER, who seconded, said that the conditions of service under the Act must be modified if the number of medical men necessary for the proper working of medical benefit were to be obtained. It was the opinion of doctors all over the country that insured persons were not getting as good service as they were before the introduction of the Act. If better men could be attracted to the panels a double advantage would be secured in that the number of persons allocated to the individual doctor would be reduced, and patients would be attracted from any gentlemen who had gone on the panels after having failed to prove their ability in private practice.

Dr. H. H. MILLS thought Mr. Turner took an unduly pessimistic view. His information was the conditions of medical treatment among persons of the insured class were better than they had been before the Act came into force. He remarked that in three months only three or four serious complaints had come before the Committee. The working of the Act had made clear the inadequacy of medical provision in the whole of the east end of London and in all industrial districts.

Mr. EVAN JONES thought an efficient service under the Act was possible if the Committee approached the matter in the right spirit. He was not satisfied with the panel system.

The resolution was carried by a large majority.

The Committee instructed the Medical Benefit Subcommittee to prepare and circulate to members of the Committee only a return showing in the case of doctors on the panel with more than 1000 patients, the name and address of such doctor, the number of such patients so far as could be ascertained from the records of the Committee, and the amount of the cheques already paid on account of medical fees.

In view of the confidential character of reports dealing with complaints, the Committee approved the principle that the names of medical practitioners, chemists, and insured persons referred to therein should not appear on the agenda paper or other public documents of the Committee.

ORGANISATION OF THE MEDICAL PROFESSION.

We are asked to announce that at a meeting of members of medical unions and other bodies in east and north-east London and the county of Essex, held in the City on April 2nd, to "consider the best means of coördinating the work and policy of the said unions," a resolution to the following effect was carried with only one dissentient :—

That in view of the coming Representative meeting, the British Medical Association be requested to summon a meeting of the chairmen and secretaries of all Statutory and Provisional Local Medical Committees, and all other bodies interested in medical organisation, as soon as possible, for the purpose of considering the national organisation and consolidation of the entire medical profession.

NATIONAL MEDICAL GUILD.

The National Medical Guild has been established to acquire for the medical profession the immunities and powers of a trade union, as well as to provide various sorts of insurance for medical men; to obtain representation in Parliament; and for such other objects as may seem necessary or advisable. It is proposed to have members and branches in all parts of the United Kingdom. The rules of the Guild have already been circulated in London, and will be sent on application to any member of the profession elsewhere. The full scheme of insurance benefits is not yet ready for issue, but members joining now will have the full benefits of medical defence, either individually or collectively, as from the date of joining. The annual subscription is 1 guinea, which should be sent to the General Secretary, National Medical Guild, 34, Villiers-street, Strand, W.C. We are informed that the rules do not differ in any material respect from those of other trade unions.

THE MORTALITY OF THE PHTHISICAL UNDER SANATORIUM AND TUBERCULIN TREATMENT.

In a lecture at the Galton Laboratory, University College, London, recently, Mr. W. Palin Elderton, Fellow of the Institute of Actuaries, made some suggestive remarks on this subject. After alluding to the difficulties of making statistical comparisons of the results of treatment, it was shown that at present the most satisfactory comparison was reached by studying the subsequent mortality of those who had undergone various kinds of treatment. The results obtained proved that the mortality of incipient cases under sanatorium treatment was, generally speaking, over 3 times that of the general population, while advanced cases showed a mortality of 10 times, and far advanced cases a mortality of about 40 times, that of the general population. Some interesting results from Dr. Lawrason Brown's statistics of the Adirondack Sanitarium, New York, were discussed, but owing to the selection of patients and the increased proportion of early cases among the patients more recently admitted it was impossible to decide definitely to what extent sanatorium treatment had improved. The statistics showed, however, that at this particular sanatorium the authorities are now better able to say which cases will improve under treatment and which cases are cured. Using the same data, Mr. Elderton showed that the mortality of cases having tubercle bacilli in the sputum was $2\frac{1}{2}$ times to 4 times as heavy as that of the cases which were without this symptom, and this result sometimes enables us to estimate the extent to which data are influenced by the admission of an undue proportion of early cases. Examples of this were given in the course of the lecture. There was no evidence, Mr. Elderton considered, to prove that tuberculin as compared with ordinary sanatorium treatment appreciably lengthened the life of the consumptive. If the use of tuberculin had the very marked results claimed by some of its supporters, more definite evidence of its effect on mortality would have been anticipated.

In view of the National Health Insurance Act and its consequences, it is important that the mortality of consumptive patients after treatment should be studied fully with the view of ascertaining the relative value of the available methods of treatment, and the lecturer suggested that the only really satisfactory method of doing so was to try the treatments on similar cases—selected not by the stage of disease but at random—and to tabulate full particulars in order to see which gave the best results.

LONDON MEDICAL COMMITTEE.

A stormy meeting was held in Caxton Hall, Westminster, on April 8th, Sir Shirley F. Murphy presiding, the occasion

being a conference called by the Local Medical Committee for the County of London. A resolution was adopted that a new committee should be chosen by local election in each borough, the existing committee, according to the proposer, being under a pledge to retire at the end of the quarter. This resolution, introduced as an amendment, took the place of one requesting the committee to continue to act for the present.

Medical News.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS OF LONDON AND SURGEONS OF ENGLAND.—At the First Professional Examination held on April 1st, 2nd, 3rd, and 4th the following candidates were approved in the undermentioned subjects:—

Chemistry and Physics.—Norman John Ainsworth, Royal Dental Hospital; Robert Aspinall-Stivala, Guy's Hospital; Frank Blake, City of London School; Antonio Mario Clément, St. Thomas's Hospital; Bernard Stanley Collings and Spencer Graeme Dunn, University College; Saad El Deen Ahmed El Daab, Cairo and King's College; John Lister Goddard, University College; Jacques Paul Joseph Jean Hagron and Austin George Hewer, Middlesex Hospital; John Hope, Manchester University; Thomas Glyn James, University College, Cardiff; Mohammed Kamil and Thomas Hawks McLeod, King's College; Herbert Masters, Manchester University; Alfred Peine, Birmingham University; Edward Rowley Peirce, Birmingham Technical School; Walter Erichsen Powell, Charing Cross Hospital; Frank Hugo Stuttaford, Plymouth Technical Schools; Ronald Agars Walker, St. Thomas's Hospital; and Edward Mackay Webster and Bernard Charles Woodroffe, Guy's Hospital.

Chemistry.—Cayetano Bethencourt, Seville and Guy's Hospital; George Wilfred Coombes, London Hospital; Jane Crawford, London Medical School for Women; Frederick Graham Leslie Dawson, London Hospital; Walter Ralph Gill Hearnden, Guy's Hospital; Mabel Marian Ingram, London School of Medicine for Women; Peirce Lloyd-Williams, Royal Dental Hospital; Hugh Morris-Jones, St. Mungo's College, Glasgow; Percival Randall, Cardiff University; Felix Tagger, Royal Dental Hospital; Charles Wilson Tomkinson, London Hospital; Cecil Vincent-Brown, Guy's Hospital; and Graham Arthur Osborne White, University College, Cardiff.

Physics.—Henry Hutton Castle, St. Thomas's Hospital; Bernard Crossley-Meates, Birkbeck College; Abdel Aziz Hassan El Zeneiny, Cairo and London Hospital; and John Reginald Houghton, Manchester University.

Biology.—Robert Aspinall-Stivala, Guy's Hospital; Edgar Richard Batho, St. Paul's School; Edward George Paul Bousfield, St. Bartholomew's Hospital; Henry Walter Breese, Birkbeck College; Charles Herbert Carroll, London Hospital; Nai Chena, Middlesex Hospital; Bernard Stanley Collings, University College; Allen Robert Crane and Frederick Graham Leslie Dawson, London Hospital; Horace Silva Drabble, Sheffield University; Keith Mitchell Keitley Duff, Guy's Hospital; Spencer Graeme Dunn, University College; Robert Erskine-Gray, South-Western Polytechnic; Ralph Byron Gibson, Sheffield University; John Lister Goddard, University College; Thomas Cornelius Higgins, M.P.S., St. Bartholomew's Hospital; Edwin Gabriel Harris, London Hospital; John Hope, Manchester University; Robert Hope, D.M.D. Harvard, L.D.S. Eng., Birkbeck College; Oscar Hyam Hyman, D.D.S. Philadelphia, St. Thomas's Hospital; William Austen Jackman, Bristol University; Alfred Kenneth Ince Jones, Middlesex Hospital; Abd El Aziz Abdul Khair, King's College; Leslie Grantham Lunnon, Middlesex Hospital; Kenneth Fergus McAlpin and Archibald Magill, Guy's Hospital; Ralph Kenneth Marwood, University College; Amin Mohammed G. Mishad, King's College; Kevin Richard O'Brien, London Hospital; Arthur Llewellyn Spencer Payne, Birkbeck College; Geraint Arthur Pennant, University College, Cardiff; Walter Erichsen Powell, Charing Cross Hospital and King's College; Douglas Sherrin Pracy, St. Bartholomew's Hospital; Ronald Eric Rampling, Frank Neon Reynolds, Alan Harvey Richardson, and Guy Rooker, St. Thomas's Hospital; Simeon Cyril Shaw, Birkbeck College; Charles Shelton, Middlesex Hospital; Gordon Ernest Lovell Simons, Guy's Hospital; Maurice Oliver Simpson, Birkbeck College; Basil Lyndon Skeggs, St. Bartholomew's Hospital; Henry Laurence Slaughter, St. Thomas's Hospital; Robert Masters Somerset, Sheffield University; John Norman Terry, St. Thomas's Hospital; Douglas Rhys Thomas, St. Bartholomew's Hospital; Howard Branston Troup, St. Paul's School; Dudley Francis Wilson, London Hospital; and Leonard Heatley Woods, St. Bartholomew's Hospital.

At the Second Professional Examination in Anatomy and Physiology, held on March 27th, 28th, and 31st, and April 1st, 74 candidates presented themselves, of whom 43 passed and 31 were rejected. The following are the names of the successful candidates:—

Alexander William Charles Bennett, St. Thomas's Hospital; Henry Cecil Herbert Bull, B.A. Cantab., Cambridge University and London Hospital; Ernest James Coombe, St. George's Hospital and King's College; George Lambert Cutts, Guy's Hospital; Arthur Thomas Daily, William Hood Dye, L.D.S. Eng., and John Fox-Russell, Middlesex Hospital; Cyril Gould, University College; Frederick Harold Sellick Greenish, B.A. Cantab., Cambridge University and London Hospital; Frank Edmund Higgins, B.A. Cantab., Cambridge University and St. Thomas's Hospital; Harold Reginald Wessen Husbands, Bristol University; Russell Walbancke Hodgson-Jones, Manchester University; Harold Leslie Hughes, St. Mary's Hospital and King's College; Frank Bernard Jago, Manchester University; Nilkanth Shrivam Jatar, L.M. & S. Bombay, Bombay University and University College; James Kyle, Guy's Hospital; Roy Dyson Langdale-Kelham, University College; Cyril George Learoyd, St. Thomas's Hospital; Ernest Alfred Leviseur, Guy's Hospital; Sidney John Liddon Lindeman, St. Bartholomew's Hospital; Reginald Walter Little, Bristol University; Eldon Munro Litchfield, New Zealand University and Guy's Hospital; George Samuel Bousfield Long, Guy's Hospital; Lewis Alexander McAfee, B.A. Cantab., Cambridge University and London Hospital; John Edward Carbery Maguire, and Rodney Honor Maingot, St. Bartholomew's Hospital; Noel Spencer Nairne, St. Thomas's Hospital; Narayen Vinayek Navalkar, Bombay University and University College; John Frederick Munton Payne, London Hospital; Frederick Porter-Smith, St. Thomas's Hospital; Edward Austin Prichard-Evans, University College, Cardiff; Ibrahim Ibrahim Abdel Rahman, Cairo and King's College; Edmund Douglas Richardson, Charing Cross Hospital and King's College; Gerald Robinson, Manchester University; Edgar Stanley Rowbotham, Charing Cross Hospital and King's College; John Clement Russell, B.A. Cantab., Cambridge University and London Hospital; Ram Sinha, Punjab University and London Hospital; John Bevil Grenville Skelton, London Hospital; Denys Munro Smith, Bristol University; Ambrose Huntington Warde, St. Thomas's Hospital; Brian Whitehead, B.A. Cantab., and Alfred Gregson Williams, Cambridge University and St. Bartholomew's Hospital; and William Edwin Wilson, St. Bartholomew's Hospital.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At the Preliminary Science Examination for the Licence in Dental Surgery the following candidates were approved in the undermentioned subjects:—

Chemistry and Physics.—Jacques Alcée, Birkbeck College; Geoffrey Walter Allen, Leicester Municipal Technical School; Albert Cecil Ayling, Polytechnic Institute; John Binford Barnett, Birmingham University; Herbert Joseph Barrand, Guy's Hospital; Samuel Saxon Barton, Liverpool University; Arthur Bowler, Holt Technical School, Birkenhead; Joseph John Chiappa and Alfred Innes Cox, Middlesex Hospital; Gerald Curle, Birmingham University; Herbert Gwyn Davies, South-Western Polytechnic; Lionel Harold Dixon, Guy's Hospital; Francis Desmond Donovan, University College, Cardiff; Barrington Eady, Municipal Technical School, Brighton; William Erle Farnham, Brighton Technical College; Harold Foulkes, Liverpool University; Frank Leslie Hooton Fox, Bristol University; William Marshall Kemp Gray, Birkbeck College; Leonard Richard Joseph Hallett, Brighton Technical College; George Henry Harding, Liverpool University; Frederick John Harvey, Birmingham University; Harold Octavius Long and Arthur Edmund Lowein, Guy's Hospital; Philip Henry Marsh and William Mercer, Brighton Technical College; Reginald Arthur Moore, Guy's Hospital; David Maurice Rees, Royal Dental Hospital; John Cowan Robertson, Guy's Hospital; Valentine Sainty, Nottingham University College; Mansfield John Knox Soutter, Middlesex Hospital; George Ernest Spero and William Harold Waldman, Royal Dental Hospital; and Alfred Ernest Young, Bristol University.

Physics.—Philip Eric Bernhard and Ernest Horace Bryant, Guy's Hospital; James Alan Gilbert, Trent College, Long Eaton; Robert Hynes, University College, Nottingham; Clarence Norman Pearson, London Hospital; William Douglas Penfold, Brighton Technical College; Reginald Charles Pinniger, Royal Albert Memorial College, Exeter; Leslie George Ridout, Royal Dental Hospital; Kenneth Stanley Roberts, Brighton Technical College; Dudley Francis Small and Hedley Victor Stebbings, Guy's Hospital; and Samuel Ogden Stewart, Liverpool Hospital.

Chemistry.—John Frederick Batsford, Guy's Hospital; Rossiter Hodgson Bywaters and James Walter Curtis, Royal Dental Hospital; George Harold Danks, Birkbeck College; Amos Soden Ford, London Hospital; Reginald Fyson, Royal Dental Hospital; Simon Sanders, Guy's Hospital; and Malcolm Wykes, Birmingham University.

LONDON SCHOOL OF TROPICAL MEDICINE.—The following is the list of the successful candidates at the examination held at the close of the forty-first session of the school:—

*Captain C. A. Gill, I.M.S., M.R.C.S., L.R.C.P., D.P.H.; *Captain F. P. Connor, F.R.C.S. Eng.; Miss C. L. Houlton, M.B., B.S. Lond.; M. C. F. Easmon, M.B., B.S. Lond., M.R.C.S., L.R.C.P.; J. R. Boyd, Colonial Service, M.B., Ch.B. Edin.; Miss E. M. Layman, Colonial Service, M.B., B.S. Lond.; F. W. O'Connor, M.R.C.S., L.R.C.P.; Miss F. M. Harper, M.B., B.Ch. Edin., D.P.H. Camb.; F. C. Doble, Colonial Service, M.R.C.S., L.R.C.P.; Miss J. McDonald, M.B. Toronto, M.R.C.S.; D. Birt, Colonial Service, M.B., B.S. Durh.; W. T. P. Meade-King, Colonial Service, M.R.C.S., L.R.C.P.; Major J. A. Hamilton, I.M.S., M.B., F.R.C.S.E.; Miss S. O'Flynn, M.B., Ch.B. Edin.; G. P. G. Beckett, Colonial Service, M.D., B.Ch., B.A.O., L.M. Dub.; Miss L. S. McLean, Colonial Service, M.B., Ch.B.; A. P. Watkins, Foreign Office, M.R.C.S., L.R.C.P.; J. F. H. Morgan, Colonial Service, M.R.C.S., L.R.C.P.; and W. E. Lewis, Colonial Service, M.B., Ch.B. Edin.

* Passed with distinction.

UNIVERSITY OF GLASGOW.—The following have passed the First Professional Examination for the degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.) in the subjects indicated (B., botany; Z., zoology; P., physics; C., chemistry):—

William Adams (Z., C.), Thomas Andrew Jamieson Aitchison (B.), Robert Aitken (Z., C.), Marshall Thomson Allan (B., P.), John David Arthur (Z.), John Ashforth (Z., C.), Alexander Basil Austin (Z., C.), Henry Ernest Cyril Bacon (Z.), John William Waddell

Baillie (Z., C.), Edward Thomas Boyle (B., P.), Archibald Campbell Brown (P.), Donald Eadie Brown (Z., C.), George Brown (Z., C.), Duncan Smith Buchanan (C.), Robert Stevenson Caldwell (Z., C.), Duncan Cameron (B., C.), Robert Barton Cameron (Z., C.), William James Simon Cameron (Z., C.), David Campbell, M.A., B.Sc. (P.), Malcolm Chalmers (Z.), Thomas Cuthbertson Christie (Z., C.), Alexander Ebenezer Cochrane (B., P.), Cyril Lockhart Cottle (Z., C.), Harold Livingstone Coulthard (Z., C.), John Salisbury Craig (Z., C.), Harold Arthur Cruickshank (Z., C.), Andrew Dick (Z., C.), James Hamilton Dobbin (Z.), Robert Kinnier Duguid (Z., C.), James Ferguson Duthie (Z.), Robert Taylor Duthie (B., Z., P.), Kenneth Henry Dyke (C)., Ralph Erskine (Z., C.), Fritz Eberhard Ferguson (B., Z.), James Brown Fisher (C.), James Paton Fleming (Z., C.), Walter Watson Forsyth (Z.), Robert Scoular France (Z., C.), Robert John Leslie Fraser (Z., C.), John Frew (Z., C.), James Biggam Douglas Galbraith (Z., C.), Arthur Blair Gibson (Z., C.), Kenneth John Alexander Gillanders (Z.), Charles Napier Gordon (Z., C.), George Osmond Grant (Z.), William Guy (Z.), James Anthony Hamilton (B., P.), William Ralston Duncan Hamilton (Z., C.), William Eric Haydon (P.), Frederick William Hebblethwaite (Z., C.), James Charles Hendrie (Z.), George Mundell Hetherington (Z., C.), John Hislop (Z., C.), James Robert Riddell Holms (Z., C.), Edward Porteous Irving (Z., C.), John Alexander Jenkins (Z., C.), Jacob Joels (Z., C.), William Hogarth Kerr, M.A. (B., Z., C.), William Mackintosh Kerr (B., P.), Peter Stewart Kinloch (Z., C.), Patrick Joseph Aloysius Lavelle (Z., C.), James Liddell (P., C.), Albert Ernest Lillicrap (Z., C.), William Wilson Lundie (Z., C.), Kenneth M'Alpine (Z., C.), Hugh Ernest M'Coll (P., C.), William Ritchie M'Crae (Z., P.), John Ronald M'Crindle (Z., C.), Arthur Daniel Clark M'Gowan (B., C.), Alexander M'Cheyne Macintosh (Z., C.), John Ebenezer MacIntyre (Z., C.), Donald James M'Kinnon (Z., C.), John Macleod (Z., P., C.), Findlay Kerr Macmillan (Z.), Donald Macqueen (Z., C.), William M'William (Z.), John Marshall (Z., C.), George Macleod Millar (Z., P.), Archibald Stewart Miller (Z., C.), William Duff Miller (Z., C.), David Stephen Mitchell (Z., C.), Livingstone Mitchell (B., Z., P.), James Moffat (Z., C.), John William Morton (Z.), James Robertson Jack Mylles (Z., C.), Douglas John Nicol (Z., C.), William Nicolson (Z., C.), John Bernard O'Neill (B., P. C.), William Harold Palmer (B., Z., P.), James Walker Patterson (Z., C.), Thomas Poole (P.), Robert Scott Reid (C.), Francisco Ribeiro (P., C.), Andrew Riddell (B., P.), Samuel Murdoch Riddick (Z.), Humphrey Robertson (Z., C.), John Joseph Robertson (B., Z., P.), Frederick James Gordon Rolland (Z.), John Llewellyn Rowlands (Z., C.), William Scott (Z., C.), Henry Buchan Sergeant (Z., C.), James Shaw (Z.), James Hamilton Shearer (Z., C.), Alexander Wallace Sinclair (Z., P.), James Smart (Z.,) Clarence Lorraine Somerville (Z., C.), Herbert Harold Spencer (C.), Charles Hugh Stewart (P., C.), Henry Stuart (Z.), Herbert Arnold Summers (Z., C.), Douglas Taylor (Z., C.), Joseph Turner Taylor (B., P.), James Joseph Treanor (P.), Robert Nisbet Walker (Z., C.), William Halliday Wallace (Z., C.), James Watt (Z.), John Pendleton White (Z., C.), Robert Wiggins (B., Z., P., C.), George Young (Z., C.), Robert Young (P.), and William Young (Z., C.).

Women.—Janetta Margaret Alexander (P.), Annetta Gillies Turnbull Anderson (Z., C.), Marjorie Mason Anderson (Z., C.), Jean Mary Frew (Z., C.), Margaret Hutchison Glen (Z., C.), Alison Mary Hunter (Z.), Grace Leisk Hunter (Z., C.), Margaret Jane Thorburn Leitch (B.), Elizabeth Clark M'Haffie, M.A. (Z., C.), Robina Stuart Mackinnon (Z., C.), Jessie Brown Maclachlan (Z., C.), Lilias Maclay (Z., C.), May Isabella Turner Reid (Z., C.), Jessie Napier Robertson (Z., C.), Margaret Nelson Robertson (Z.), and Mary MacLean Weir (P., C.).

The following have passed in the subjects indicated (A., anatomy; P., physiology; M., materia medica and therapeutics) the Second Professional Examination (Old or New Ordinance), or the Third Professional Examination (New Ordinance) for the degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.):—

Ismail Abdurahman (A.), Robert Aitken (A., P.), William Allan (M.), Robert Mitchell Stewart Boyd (P.), William Ernest Boyd, M.A. (M.), John Bradford (M.), Donald Campbell Buchanan, M.A. (P.), John Buchanan (A.), William Edmund Alexander Buchanan (M.), Donald Ronald Colin Cameron (A., P.), John Camerop (A., M.), Dugald Stewart Campbell (A., P.), John Munro Campbell (M.), Moses Wolffe Cantor (A., P.), Alfred Mackenzie Clark (M.), Allan La Barte Clark (P.), John Connal (P.), Robert Stobo Crawford (P.), Henry Paterson Crow (A., P.), William Cunningham (A., P., M.), William Donald (P.), Alexander Hogg Donaldson (A., P., M.), Ernest M'Murchie Dunlop (A., P.), Thomas Ferguson (P.), Harry Taylor Findlay (M.), Robert Forbes (A., P., M.), George John Fraser (A., P.), Walter Weir Galbraith (M.), Leonard Woodburn Gemmell (P.), Robert Stuart Gibson (A., P.), John Gilchrist (A.)., Robert Kinnear Hay Gillespie (A., P.), Colin Campbell Blair Gilmour (A., P., M.), John Glaister (P.), William Gordon (A., P.), Ronald Thomson Grant (M.), Arnot Campbell Hepburn (A., P., M.), William Allan Higgins, M.A. (A., P.), Rollo Isbister (M.), George Kirkhope (A., P.), John Crawford Knox (M.), Robert Kyle (A., P., M.), Hugh Brown Lawrie (A., P., M.), James Alexander Leiper (A., P.), Alfred Thomas Logan (A., P.), Peter Young Lyle (A., P.), Reginald Lyon (P.), Hugh Lawrence M'Cormick (P., M.), Hugh Douglas M'Crossan (P.), Archibald Munn M'Cutcheon (M.), Duncan Fraser Macdonald (M.), Donald John MacDougall (M.), David M'Farlane (A., P., M.), John Mandeville Macfie (A., P.), Gerald James M'Gorty (A., M.), Archibald M'Innes (A., P., M.), Alexander Fraser M'Intosh (A., P., M.), James Murdoch Mackay (M.), George Maclean (A., P., M.), Peter Donald MacLean, M.A. (A., P., M.), Malcolm Bonar Macleod (A., P., M.), David M'Neill (P.), William Martin (P.), James M'Donald Matheson (M.), John Campbell M'Intyre Matheson (P., M.), Thomas Duff Miller (A., P., M.), John Desmond Milligan (A., P., M.), Peter Orr Moffat (P., M.), Laurence Sebastian Morgan (A., P., M.), Noah Morris (A., P.), Frederick William Morrison (A., P., M.), Hugh Adam Munro (A., P., M.), Prem Nath (M.), William O'Brien (A., P., M.), Michael O'Callaghan (A.), James Alphonsus O'Connor (M.), Arthur William Panton (A., P., M.), John Roberts Pate (A., P.), James Paterson (A.), James Herbert Paul, M.A. (A., P., M.), William James Poole (M.), William Burns Primrose (M.), Hugh Quigley (M.), John King Rennie (A., P.), James Richardson (P.), David Bell Robertson (M.), George William Ronaldson (A., P.), Kenneth M'Alpin Ross (A., P., M.), William Jack Scade (A., P., M.), Seymour Cochrane Shanks (M.), William Frederick Shanks (M.), John Sillars (A.), James Tait Smith (A., P., M.), John Smith, M.A. (P.), Andrew Stenhouse (A., P.), John Stirling (A., P.), Robert Sutherland Strachan (M.), Robert Taylor (A., P., M.), Cecil Raymond Tytler Thompson (P.), Robert Taylor Todd (A., P.), Adrian Johannes Van der Spuy (A., M.), George Turnbull Walker (M.), James Walker (M.), James Gordon Wilson (A.), Thomas M'Skimming Wilson (P.), Alexander Young (P.), and Thomas Young (A., P., M.).

Women.—Jane Beattie Davidson (A.), Janet Fraser Henderson (A.), Helen Isobel Winifred Kerr (M.), Dorothy M'Cubbin (M.), Margaret Jane Maclachlan (P.), Mary Anderson Noble (P.), Mary Scott (A.), Margaret Ann Hendry Stewart (A., P.), Isabel Stirling Thomson (A., P.), Margaret Walker (M.), Mary Ferguson Wood, M.A. (P.), and Isabella Henrietta Younger (M.).

The following have passed in the subjects indicated (P., pathology; M., medical jurisprudence and public health), the Third Professional Examination (Old and New Ordinance), for the degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.):—

George Kirkwood Allan (P.), James Mair Anderson (P.), John Anderson (M.), Robert Armstrong (P., M.), George Fleet Barr (P., M.), Andrew Duffield Blakely (P.), Robert William Brander (P., M.), William Hunter Brown (P., M.), Maurice Smith Byrce (P., M.), Samuel Bryson (P.), James Alexander Chrystie (M.), Robert Clark, M.A. (P.), Andrew Climie (P., M.), Benjamin Cohen (M.), George Gibson Cooper (P., M.), James Paterson Crawford (P., M.), William Cullen (M.), John Nairn Dobbie (P., M.), Thomas Ingram Dun (P., M.), Dugald Ferguson (P., M.), James Jackson Finlay (P., M.), George Fleming (P.), James Bryan Fotheringham (P.), Allan Dumbreck Fraser, M.A., B.Sc. (P., M.), Robert Frew, B.Sc. P., M.), Walter Weir Galbraith (P.), Alexander John Gibson (P., M.), Thomas Gilchrist, M.A. (P.), John Aitken Gilfillan (P., M.), George Gordon (P.), Peter Gordon (P., M.), Robert Masson Greig (P., M.), Alexander Hislop Hall (P., M.), David Cochrane Hanson (P., M.), David Hardie, M.A. (P., M.), Joseph Welsh Park Harkness, M.A. (P., M.), Fergus Leslie Henderson (P., M.), Thomas Cameron Houston (P.), Alastair Caulfield Jebb (P., M.), David Johnston (P., M.), Douglas Reid King (P., M.), William Joseph Brown Lavery (M.), George Smith Livingston (M.), Douglas M'Alpine (P., M.), Daniel Steel MacBean (P., M.), George M'Callum (P., M.), Joseph M'Culloch (P., M.), Charles Robertson M'Intosh M.A. (P., M.), Donald M'Intyre (P., M.), David Mackie (P., M.), Joseph Allan MacLean (P., M.), William Edward M'Lelland (P., M.), James Kennedy Manson (P.), Andrew Paton Martin (P., M.), William Strelley Martin, M.A. (P.), James M'Donald Matheson (P.), Walter John May (P., M.), William Meikle (P., M.), Alexander Dryden Moffat (P., M.), James William Moffatt (P., M.), Percival John Moir (P., M.), Prem Nath (P.), Thomas Augustine O'Brien (M.), William Luddington Peacock (P., M.), Andrew Picken (P., M.), John M'Lean Pinkerton, B.Sc. (P.), Hugh Quigley (P.), Frederick Powlett Rankin (P.), Adam Rankine (P., M.), Robert Ray (P., M.), Thomas Forbes Brown Reid (P.), Robert Cecil Robertson (P., M.), Stanley Robertson (P., M.), Stuart Robertson (P., M.), Archibald M'Kerrow Russell (P.), Alexander Scott (P., M.), Norman M'Gaan Smith (P.), John Banks Steven (P.), John Fraser Steven, M.A. (M.), Henry Stewart, M.A. (M.), John Symington Stewart (P., M.), Robert Tennent (P., M.), Robert Noel Thomson (P., M.), William Thomson, M.A. (P.), James Vallance (P., M.), William Semple Wallace (P., M.), Henry Currie Watson (P.), Joseph Bannister Williamson (P., M.), Alexander Sweet Wilson (M.), John Wylie (P., M.), Thomas Wilson Wylie (P., M.), Gavin Young (P., M.), and John Miller Young (P., M.).

Women.—Grace Gillies Turnbull Anderson (P., M.), Agnes Elizabeth Mary Cooke (P.), Dagmar Florence Curjel (P.), Ethel Winifred Gompertz (P.), Jessie Gordon M'Laren, M.A. (P., M.), Gladys Montgomery (P., M.), Sara Adam Watson (P., M.), Grace Birrell Whish (P., M.), and Marguerite Wilson (P.).

The following have satisfied the examiners in the Fourth (Final) Professional Examination:—

Degrees of M.B., C.M.—Andrew Phillips Aitken.

Degrees of M.B., Ch.B.—Cecilia Smail Turnbull Anderson, Janet Rankine Anderson, William Larmour Anderson, Henry Stanley Banks, M.A., Richard Archibald Barlow, B.Sc., John Smith Knox Boyd, James Law Brownlie, Alexander Grahame Buchanan, William Leonard Cassells, B.Sc., John Connell, Robert Craig, M.A., William Cameron Davidson, Walter Elliot Elliot, B.Sc., James Fraser, William Fraser, Alexander Glen, James Lochhead Gregory, James M'Farlane Grier, M.A., William Muir Howells, Douglas MacInnes Hunter, Jane Kerry M'Elroy Hunter, John Ferguson Hutton, M.A., Thomas Pollock Inglis, Charles Joseph Kirk, Mary Anne Kirk, Peter Alexander M'Callum, John M'Ghie, Margaret Helen M'Killop, Murdoch Hugh MacLeod, John Henry Magoveny, William Ebenezer Maitland, William Montgomery, James Leslie Ruthven Philip, Sarah Anderson Jamieson Rankine, Frank Morton Robertson, Archibald Watson Russell, James John Sinclair, Neil Islay Sinclair, James Anstruther Smith, Roderick Alexander Steven, George Taylor, M.A., Ernest Graham Young Thom, M.A., Angus Walker, James Cairns Watt, James Whiteside, and Andrew Morton Young.

The following candidates passed with distinction in the subjects indicated:—

First Examination.—In Zoology: Robert Stevenson Caldwell, Thomas Cuthbertson Christie, Harold Arthur Cruickshank, William Hogarth Kerr, M.A., Lilias Maclay, Humphrey Robertson, Henry Buchan Sergeant, and Henry Stuart. In Physics: David Campbell, M.A., B.Sc., and Robert Wiggins. In Chemistry: Annetta Gillies

Turnbull Anderson, Margaret Hutchison Glen, William Ralston Duncan Hamilton, James Robert Riddell Holms, Albert Ernest Lillicrap, Kenneth M'Alpine, and John Marshall.

Second Examination.—In (*a*) Anatomy and in (*b*) Physiology: Ernest M'Murchie Dunlop. In Anatomy: Moses Wolffe Cantor, Arnot Campbell Hepburn, and John Mandeville Macfie. In Physiology: John King Rennie. In Materia Medica and Therapeutics: Archibald Munn M'Cutcheon, Alexander Fraser M'Intosh, and Hugh Adam Munro.

Third Examination.—In Pathology: James Kennedy Manson, James William Moffatt, Stuart Robertson, Sara Adam Watson, Joseph Bannister Williamson, and Marguerite Wilson. In Medical Jurisprudence and Public Health: William Edward M'Lelland and Andrew Paton Martin.

Fourth (Final) Examination.—In (*a*) Surgery and Clinical Surgery, in (*b*) Practice of Medicine and Clinical Medicine, and in (*c*) Midwifery: John Smith Knox Boyd and William Cameron Davidson. In (*a*) Surgery and Clinical Surgery and in (*b*) Midwifery: Richard Archibald Barlow, B.Sc. In Midwifery: Henry Stanley Banks, M.A., and William Forsyth.

UNIVERSITY OF DURHAM.—At the Convocation held on March 29th the following degrees and diplomas were confirmed:—

Doctor of Medicine.—Leonard Foster Browne, John George Campbell, William Harold Edgar, Isaiah Hodgkinson, James Collings Hoyle, Hector Graham Gordon Mackenzie, Frank Widowfield Melvin, and William Robert Elstob Unthank.

Doctor of Medicine for Practitioners of 15 years' standing.—Daniel Durward Brown, James George Blyth Coleman, Walter Lisle Taylor Goodridge, Alfred Johnson, James Sprent Robertson, William Bedell Stanford, Ellis Rae Thomas, and William Southwick Willmore.

Master of Surgery (*M.S.*).—Eldred Curwen Braithwaite.

Bachelor of Medicine (*M.B.*).—John Stanley Arkle, Theonie Renée Burrell, B.Sc., William Leitrim Clements, Herbert Grantham Dodd, Frederick John Henry Tobias Frere, Cyril John Henderson, William Joseph Hickey, Charles Henry Robson, and Sidney Scott, College of Medicine, Newcastle-upon-Tyne; and Russell Vyvyan Steele, University College, London.

Bachelor of Surgery (*B.S.*).—John Stanley Arkle, Theonie Renée Burrell, B.Sc., William Leitrim Clements, Herbert Grantham Dodd, Frederick John Henry Tobias Frere, William Joseph Hickey, Charles Henry Robson, and Sidney Scott, College of Medicine, Newcastle-upon-Tyne; and Russell Vyvyan Steele, University College, London.

Bachelor of Hygiene (*B.Hy.*).—Patrick Albert Galpin and William Hudson.

Diploma in Public Health (*D.P.H.*).—Patrick Albert Galpin and William Hudson.

Licence in Dental Surgery (*L.D.S.*).—George Vernon Watt, College of Medicine, Newcastle-upon-Tyne.

FOREIGN UNIVERSITY INTELLIGENCE.—*Algiers* (*Medical School*): Dr. Poujol has been appointed to the chair of Pathological Anatomy.—*Bologna*: Dr. Pazzi, of Genoa, has been recognised as *privat-docent* of Midwifery and Gynæcology, and Dr. A. Ghedni as *privat-docent* of Operative Medicine.—*Bonn*: Dr. Karl Bachem, *privat-docent* of Pharmacology, Dr. Hugo Stursberg, *privat-docent* of Medicine, and Dr. Erich Zurhelle, *privat-docent* of Gynæcology, have been granted the title of Professor.—*Boston* (*Harvard University*): Dr. Richard P. Strong has been appointed to the chair of Tropical Diseases.—*Breslau*: Dr. F. Henke, of Königsberg, has been appointed to the chair of General Pathology and Pathological Anatomy, in succession to Dr. Ponfick, resigned.—*Catania*: Dr. A. D'Urso has been recognised as *privat-docent* of Anatomy, and Dr. G. Zurria as *privat-docent* of External Pathology.—*Düsseldorf* (*Academy of Practical Medicine*): Dr. J. G. Mönckeberg, extraordinary professor of Pathological Anatomy in the University of Giessen, has been appointed Director of the Municipal Pathological Institute and Member of the Faculty of the Academy, in succession to Dr. O. Lobarsch, who goes to Kiel.—*Halle*: Dr. Aichel has been recognised as *privat-docent* of Anatomy, and Dr. F. Lehnerdt as *privat-docent* of Pædiatry.—*Heidelberg*: Dr. F. Lust has been recognised as *privat-docent* of Pædiatry.—*Kiel*: Dr. Max Kappis has been recognised as *privat-docent* of Surgery.—*Königsberg*: Dr. F. B. Hofmann, professor in Prague, has been appointed to the chair of Physiology, in succession to Dr. Hermann, resigned; Dr. Hans Reiter has been recognised as *privat-docent* of Hygiene and Bacteriology.—*Lausanne*: Dr. H. Vulliet, *privat-docent* of surgery, has been promoted to Extraordinary Professor.—*Lemberg*: Dr. G. Bikeles, *privat-docent* of neurology, has been granted the title of Ordinary Professor.—*Lille*: Dr. Lambert has been appointed to the new chair of Clinical Surgery.—*Marburg*: Dr. Jores, of the Cologne Academy of Practical Medicine, has been appointed to the chair of Pathological Anatomy, in succession to Dr. Martin B. Schmidt.—*Montevideo*: Dr. Gerardo Arrizabalaga has been appointed to the chair of Clinical Surgery; Dr. Jaime H. Oliver has been appointed Professor of Operative Medicine.—*Naples*: Dr. Raffaeli Lettieri and Dr. Ignazio Scalone have been recognised as *privat-docenten* of External Pathology.—*Pavia*: Dr. F. Marcora has been recognised as *privat-docent* of Medical Pathology; and Dr. G. Verdelli as *privat-docent* of Midwifery and Gynæcology.—*Philadelphia* (*Medico-Chirurgical College*): Dr. Ross H. Skillern has been appointed Professor of Laryngology in succession to Dr. Cleveland.—*Philadelphia* (*Women's Medical College*): Dr. Randle C. Rosenberger, of Jefferson College, has been appointed Professor of Hygiene.—*Prague* (*German University*): Dr. R. Schmidt, professor in Innsbruck, has been appointed to the chair of Medicine in succession to the late Dr. Pribram.—*Rio de Janeiro*: Dr. Antonio Austregesilo has been promoted to the chair of Clinical Neuroses.—*Rome*: Dr. R. Dalla Vedova, of Modena, has been appointed Extraordinary Professor of Orthopædic Surgery.—*Rostock*: Dr. M. Wirths has been recognised as *privat-docent* of Ophthalmology, and Dr. A. Burchard as *privat-docent* of Radiology.—*San Paulo*: Dr. Ficker, of the Hygienic Institute, Berlin, has been appointed to take temporary charge of the Municipal Bacteriological Institute, having obtained a year's leave from Berlin for that purpose.—*Vienna*: Dr. von Ebner, professor of histology, is retiring on account of advancing age; Dr. Richard Stern has been recognised as *privat-docent* of Neuropathology, and Dr. Rudolf Neurath as *privat-docent* of Children's Diseases.—*Würzburg*: Dr. Martin B. Schmidt, of Marburg, has been appointed Professor of Pathological Anatomy in succession to Dr. Kretz, resigned.

METROPOLITAN POLICE SURGEONS' ASSOCIATION.—The annual meeting of this association was held at Frascati's Restaurant on April 2nd. Mr. Meredith M. Townsend was elected president for the coming year, and Dr. G. A. Hamerton vice-president. Dr. C. Owen Fowler and Dr. G. Nicol Henry, the honorary secretaries, received the thanks of all the members for the way in which they had fulfilled their arduous duties, and were unanimously requested to continue in office. Mr. H. Bott was re-elected honorary treasurer, and the six vacancies on the council were filled by the election of Mr. A. E. Kennedy, Dr. G. B. Scott, Mr. C. T. W. Hirsch, Dr. W. A. Rudd, Dr. W. R. Burgess, and Mr. Percy Clark. The meeting was followed by the annual dinner, which was under the chairmanship of the President (Mr. Victor A. Jaynes), who was supported by Mr. Paul Taylor, one of the metropolitan police magistrates, Mr. C. A. Ballance, M.V.O., the new chief surgeon, Mr. S. I. Oddie, one of the coroners for the County of London, and Mr. G. H. Tripp, the Receiver for the Metropolitan Police District. After the usual loyal toasts had been honoured, Mr. Taylor, in a humorous speech, proposed "The Metropolitan Police Surgeons' Association." He remarked on the many links of common interest there were between magistrates and police surgeons, and what a help the latter were to him in his work, and how he, in spite of the allurance of advocacy, was always guided by the opinion of the divisional surgeon, which always gave a correct summary of the situation without flowery language, though he had a recollection of one member who generally certified cases of alcoholism as "stinking drunk." Dr. R. Esler gave the toast of "The Commissioners and the Receiver," which in the unavoidable absence of Sir Frederick Wodehouse, K.C.V.O., was replied to by Mr. Tripp, to whom Dr. Esler had facetiously referred as the official enemy, but actual friend of all police surgeons, even in the matter of special fees. Dr. Fowler proposed "The Chief Surgeon" and feelingly mentioned the late chief surgeon, Mr. Clinton Dent, and the many benefits divisional surgeons now enjoy which were brought about through the instrumentality of the late Mr. Dent, whose personal charm and record of work would always be remembered and would be a stimulant and encouragement to his distinguished successor, to whom the association extended a very hearty welcome and hoped that the friendly relationship of the past between the chief surgeon and divisional surgeons would be continued in the future. Mr. Ballance made a most interesting reply. Mr. Bott, in an entertaining speech, expressed the satisfaction all felt at seeing the guests, which was responded to by Mr. Arthur Denman, who feelingly gave a reminiscence of how a client he had defended, in obtaining some boots, had disarranged a constable's buttons, and how the secretary of the association had attended in court regarding the matter. Between the toasts Miss Ethel Williams, Miss Margaret Crawford, Mr. Walter Dennis, and

Mr. William Cox added to the enjoyment of the company by their excellent rendering of songs.

THE DUTY AND DISCIPLINE MOVEMENT.—A meeting will be held to-day (Friday, April 11th) at 5.15 P.M. at Caxton Hall, Westminster, S.W., under the presidency of Professor Robert Saundby, M.D., when Dr. Eric L. Pritchard and Mr. Alfred F. Tredgold will speak on Self-development and National Health.

CHELSEA HOSPITAL FOR WOMEN.—The annual meeting of the governors of this hospital was held on April 3rd, the President, Viscount Castlereagh, in the chair. The council's report showed that satisfactory progress had been made during 1912 in the collection of funds for the rebuilding of the hospital and its nurses' home on the site so generously given by Earl Cadogan. Through the dinner at which Viscount Castlereagh and the Countess of Ilchester, the president of the ladies' committee, had jointly presided in November, over £8000 was added to the amount available. Nearly £500 was sent in small amounts from former patients. King Edward's Fund had made a first grant of £1000. The medical work was again excellent; of the 885 in-patients, 516 had needed operative treatment of a critical nature, but the rate of mortality was only 1½ per cent.

WEST END HOSPITAL FOR NERVOUS DISEASES.—The annual meeting of this hospital was held last week, Mr. Leonard Brassey, M.P., being in the chair. Although the subscriptions and donations during 1912 had somewhat fallen off, yet patients' payments, dividends, and legacies all showed increases, and the total income amounted to some £350 more than that of 1911. The total expenditure also showed a small increase, owing to some extraordinary charges which had to be included this year. The average weekly cost per in-patient was less than in the previous year by 4*s*. 5*d*., and the cost per out-patient attendance was also reduced. In-patients under treatment numbered 319; but there is a very long list of patients awaiting admission, amounting in the case of women to four or five for each bed. The provision of extra accommodation is most urgently needed, and an appeal is made for donations to wipe off the £5000 debt, so that a scheme of extension may be taken in hand.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—The annual meeting of the above society will be held at 1, Wimpole-street, London, W., on Thursday and Friday, April 24th and 25th, 1913. The morning sessions will be from 10.30 to 12.30 and the afternoon from 2.30 to 4.30. On Thursday morning, April 24th, at 1, Wimpole-street, the following papers will be read:—Mr. Frank Juler: Acute Purulent Keratitis in Exophthalmic Goitre treated by Repeated Tarsorrhaphy. Mr. Ormond: Two cases of Permanent Hemianopia following Migraine. Dr. Taylor and Dr. Gordon Holmes: (*a*) Conditions Present in Several Members of a Family with Hereditary Optic Atrophy; (*b*) Unusual Conditions Associated with Optic Atrophy of the Family Type. Mr. Bishop Harman: (*a*) An Analysis of 250 Cases of High Myopia; (*b*) A Suggestion for the Grading of Fundus Changes in Myopia. On Thursday afternoon, April 24th, at 1, Wimpole-street, the following papers will be read:—Mr. Angus Macnab: An Operation for the Excision of the Conjunctival Sac and Lid Margins. Mr. Dorrell: Sensory Reflex in Tobacco Amblyopia. Mr. Treacher Collins and Mr. Hudson: On the Pathological Examination of an Eye with Congenital Anterior Staphyloma. Mr. Treacher Collins: Visible Vessels on the Surface of the Iris. The annual business meeting will be held at the conclusion of the afternoon meeting on Thursday. On Friday morning, April 25th, at 1, Wimpole-street, W., there will be a discussion on Vascular and other Retinal Changes in Association with General Disease, to be opened by Dr. James Taylor, Dr. Louis Werner, and Mr. George Coats. On Friday afternoon, April 25th, at 2.30, the society will meet at the Royal London Ophthalmic Hospital, City-road, E.C., when the following cases and others will be shown:—Mr. Angus Macnab: An Early Case of Chronic Glaucoma Operated on by Trephining, in which there was subsequently a diminution in the excavation of the disc. Mr. Treacher Collins: A case of Buphthalmos with Full Vision and without any cupping of the optic disc. Mr. Ormond: (*a*) Thrombosis of the Retinal Veins, shown at a meeting of the Ophthalmological Society in October, 1906; (*b*) case of Albuminuric Retinitis of ten years' standing. Mr. Lawford: Vascular and Retinal Changes resulting from Partial Venous Thrombosis. A discussion will follow the examination of the cases. An exhibition of ophthalmic instruments, &c., will be held during the days of the meetings at the rooms of the Medical Society of London, 11, Chandos-street, Cavendish-square, W., to which all members are invited.

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS.

Milk and Dairies (Scotland) Bill.

THE Milk and Dairies (Scotland) Bill, which was recently introduced in the House of Commons by Mr. MCKINNON WOOD, the Secretary for Scotland, is designed to "ensure the purity of milk supplies and to regulate dairies in Scotland and for other purposes connected therewith."

As stated in a memorandum, the main objects of this Bill are to provide for—

1. The appointment by local authorities of a veterinary inspector.
2. The inspection of dairies, and of the cattle therein.
3. The registration of dairies.
4. The provision of by-laws for—
   (*a*) the inspection of cattle;
   (*b*) the construction, &c., of dairies;
   (*c*) the prevention of impurities in milk, and the cleanliness of persons engaged in dairy business;
   (*d*) the precautions to be taken by dairymen against infection.
5. The issue of regulations by the Local Government Board for Scotland for—
   (*a*) the prevention of danger to public health from the importation of milk, butter, and cheese; and
   (*b*) securing the supply of pure and wholesome milk.
6. The prohibition of the supply of milk which has caused or is likely to cause infectious disease.
7. The establishment by local authorities of milk depôts for the sale of milk specially prepared for infants.

The provisions as to registration supersede the provisions as to the registration of dairies contained in the Contagious Diseases (Animals) Acts, and the Orders made thereunder. The provisions as to the inspection of dairies and prohibition of the supply of milk are an extension of those contained in Sections 60 and 61 of the Public Health (Scotland) Act, 1897. The Board of Agriculture and Fisheries have issued an Order under the Diseases of Animals Act, 1894, dealing with tuberculous cows, and providing for the payment of compensation in cases of slaughter. The Treasury are prepared, subject to the assent of Parliament, to sanction the payment from the Exchequer of one-half of the net amount paid by way of compensation for a period of five years.

Medical Attendance under the Insurance Act.

It is expected that on Wednesday, April 30th, the House of Commons will discuss a motion dealing with the administration of the Insurance Act and medical benefit.

Vaccination Acts (Repeal) Bill.

Amongst the Bills recently introduced in the House of Commons is one "to repeal the Vaccination Acts, 1867 to 1907." It was presented by Mr. BLACK.

Select Committee on Patent Medicines.

The Select Committee of the House of Commons on Patent Medicines heard further evidence on Thursday, April 3rd, on behalf of the owners of proprietary remedies.

HOUSE OF COMMONS.

WEDNESDAY, APRIL 2ND.

Aged Members of Friendly Societies.

Captain FABER asked the Secretary to the Treasury whether anything was to be done to prevent members of Friendly Societies of over 65 years of age being compelled to pay increased contributions for medical attendance and treatment.—Mr. MASTERMAN replied: I have nothing to add to the answers which I have already given on this subject.

Mr. W. CROOKS: May I ask whether the subject might be reconsidered in the interest of the old people?—Mr. MASTERMAN: Certainly, the understanding was that these people would receive medical attendance and treatment on the terms which the Friendly Societies now offer.

Captain FABER: With whom was the understanding made?—Mr. MASTERMAN: With representative members.

Mr. O'GRADY: Was this statement based on the assumption that the fees to be paid to medical men would be less than the amount which was afterwards agreed to be paid?—Mr. MASTERMAN: That is exactly true. They were willing to take the people for 6*s*. The societies are now offering 6*s*., which is 2*s*. more than they used to pay.

Mr. WORTHINGTON EVANS: Is it not intended that the members of Friendly Societies who are not within the Act should have exactly the same treatment as those who are within the Act?—Mr. MASTERMAN: At a reasonable figure. The fact that we are giving half-a-crown

Government subsidy more than for the others would, I should have thought, have made the doctors more willing to take these patients.

Medical Benefit and Migratory Insured Persons.

In reply to Viscount WOLMER, Mr. MASTERMAN said: An insured servant who moves from one area to another may, by giving notice to the Insurance Committee of the area to which he moves, obtain the services of a doctor in the latter area, even though he moves more than once a quarter. The general question of the best machinery for dealing with these cases has been referred to the Advisory Committee, and is at present under consideration.

Closing Orders under the Housing and Town Planning Act.

Mr. DOUGLAS HALL asked the President of the Local Government Board whether the Government would consider the advisability of introducing legislation to alter the terms of the closing orders in the Housing, Town Planning, &c., Act so that the demolition order need not compel an owner of condemned property to raze the dwelling to the ground without the option of being able to turn it into uses other than that of human habitation.—Mr. BURNS answered: The matter referred to in the question has been brought to my notice on several occasions, and I hope when an opportunity offers to suggest an amendment of the Act of 1909 so as to meet the difficulty.

Nursing Arrangements in Poor-law Institutions.

Mr. DICKINSON asked the President of the Local Government Board whether, in considering the proposed Poor-law Institutions Order in so far as it would affect the nurses and the nursing in such institutions, he had received any representations from the Workhouse Nursing Association or from other societies or persons having special acquaintance with nursing arrangements in Poor-law institutions; and whether he was willing to consider any suggestion that they might make for rendering the provisions of the Order in this respect more effective before he finally approved it.—Mr. BURNS furnished the following written reply: The Departmental Committee who are considering this matter have not yet made their report with regard to the proposed Order. I have already brought under the notice of the committee for their consideration the representations submitted to me by the Workhouse Nursing Association, and I understand that they will be glad to receive any further suggestions which may be made to them on the subject.

Registration under the Pharmacy Acts.

Mr. CHARLES BATHURST asked the Secretary of State for the Home Department whether he was aware that the council of the Pharmaceutical Society had not up to the present taken any steps to make by-laws under Section 4 (b) of the Poisons and Pharmacy Acts, 1908, providing for the registration as pharmaceutical chemists or chemists and druggists under the Pharmacy Acts, 1852 and 1868, of, among others, certified assistants to apothecaries under the Apothecaries Act, 1815; and whether he would take any and, if any, what steps to induce the council to pass such by-laws without further loss of time.—Mr. MCKENNA wrote in reply: The matter is receiving the continuous and careful attention of the Privy Council Office.

WEDNESDAY, APRIL 3RD.

Medical Practices under the Insurance Act.

Mr. KING asked the Chancellor of the Exchequer whether he had become aware of the increased values of medical practices owing to the National Insurance Act; and whether with a view of securing to the State some part of an increased value which the State had conferred, he would consider the propriety of imposing in his forthcoming Budget an increment duty on transferred medical practices.—Mr. LLOYD GEORGE replied: I am well aware that medical practices have increased in value owing to the National Insurance Act, but I am unable to adopt the suggestion contained in the last part of the question.

Medical Benefit in Ireland.

Mr. W. O'BRIEN asked the Chancellor of the Exchequer to state on what principle he proceeded, in the appointment of the Treasury Committee on Medical Benefit in Ireland, in excluding from the committee all the 70 Nationalist representatives of the provinces of Munster, Leinster, and Connaught, while admitting the Nationalist representatives from Ulster, who are the presidents of the Board of Erin Order of Hibernians and Irish National Foresters, respectively, and appointing also on the committee three of the Irish Insurance Commissioners, who had a direct financial interest in the extension of the medical benefit; and whether there was any intention of giving effect by legislation this session to any report proceeding from such a committee.—Mr. LLOYD GEORGE answered: In appointing the committee the Government proceeded according to precedent by consulting the representatives of the majority of the Irish people. I would also point out that only two of the Irish Insurance Commissioners are members of the committee. I am unable to make any statement with reference to the last part of the honourable Member's question.

Mr. T. M. HEALY: Is the right honourable gentleman aware that this committee is now engaged in issuing an interim report, and has he any knowledge of that report or why the committee is proceeding to do that until we have the report of all the evidence?—Mr. LLOYD GEORGE: I have absolutely no control over their report. I have received no interim report and have not discussed it with them at all.

Mr. HEALY: Can we have an undertaking that the Government will not proceed to act upon an interim report until we have got a full and adequate report and the entire evidence and have had an opportunity of discussing it?—Mr. LLOYD GEORGE: I think the honourable gentleman had better give notice of that. I have received no report.

Replying to Mr. HEALY, who asked a series of questions in regard to the appointment of a committee to inquire into the question of the extension of medical benefits to Ireland, Mr. ASQUITH (the Prime Minister) wrote: The committee was appointed by the Board of Treasury, of which I am a member; sanction to the payment of its expenses from public funds was given by that Board, on the recommendation of the Chancellor of the Exchequer; the committee will report to the Board. In all these points the procedure follows that adopted in the analogous case of the committee under the chairmanship of my honourable friend the Member for Inverness-shire which inquired recently into the provision of medical attendance in the Highlands and Islands of Scotland. As an Irish precedent I may quote the Treasury Committee on the Royal Hibernian Academy and the Metropolitan School of Art, the expenses of which were defrayed from the Vote for temporary commissions in 1905-6 and 1906-7, and on which an Irish Member of Parliament served. There can to my mind be no question that departments of State are competent to make in any part of the United Kingdom any inquiries that may be necessary in order to discharge on behalf of the Government the duties incumbent upon them. The procedure adopted by committees and commissions is substantially identical.

Epidemics in Public Elementary Schools.

Mr. KING asked the President of the Board of Education whether he was aware of the overcrowded state of many public elementary schools and the present prevalence of epidemic diseases among scholars, resulting in the closing of schools and inconvenience and anxiety to parents; whether he had made inquiries to ascertain whether epidemic diseases were more frequent and severe in the overcrowded schools than those suitably occupied; and, if not, whether inquiries would be made into this matter.—Mr. J. A. PEASE said in reply: I am afraid that I cannot accept statements in such general terms as those contained in the first part of the question. The Board make continual inquiries into cases of epidemic disease, and in such inquiries naturally pay special attention to the nature of the accommodation in the schools concerned.

Final Report of the Tuberculosis Committee.

Mr. CHARLES BATHURST asked the Prime Minister whether it was proposed, in pursuance of the Final Report of the Departmental Committee on Tuberculosis, to establish an advisory body to deal with research work in connexion with this disease; and whether, seeing that such a body would be largely concerned with bovine tuberculosis, he would include in its *personnel* representatives of stock-owners in addition to scientists and departmental officials.—Mr. ASQUITH replied: When the question of constituting such a body as is referred to has to be taken up, the claims of all interests deserving representation will be carefully considered.

Metropolitan Asylums Board.

Mr. W. CROOKS asked the President of the Local Government Board whether patients suffering from measles, whooping-cough, or puerperal fever in London, who were recommended for admission by the medical officer of health as being incapable of isolation at home, were admitted to the Metropolitan Asylums Board hospitals without charge and without any payment being permitted on behalf of any such patient; whether patients suffering from these diseases, under exactly similar home circumstances, who were recommended for admission by the relieving officer or district medical officer as being incapable of isolation at home, were made the subject of a charge which the board of guardians attempts to collect from the parent or husband of the patient; would he state the ground of distinction between the two classes of cases and the justification for admitting the one set of patients without charge whilst exacting a payment from the other set of patients for exactly the same hospital accommodation, in the same wards, paid for by one and the same rate; and whether, in the interests of the public health and to prevent the hardships now being caused to many very poor people, he would put cases of measles, &c., on the same footing as cases of scarlet fever, making no charge whenever removal to hospital was recommended because of the lack of facilities for isolation.—Mr. BURNS answered: All persons treated in the hospitals of the Metropolitan Asylums Board are admitted without charge, and the cost of their maintenance therein is paid out of the Metropolitan Common Poor Fund. I am not aware that it is the general practice of boards of guardians to recover any portion of this cost from relatives of persons sent to these hospitals in the circumstances mentioned, but if my honourable friend will furnish me with particulars of any such cases, I shall be happy to make further inquiries in the matter.

The Scottish Mental Deficiency Bill.

Mr. MCKINNON WOOD (Secretary for Scotland) informed Major HOPE that he could not fix a day for the introduction of the Scottish Mental Deficiency Bill, but he would introduce it as soon as possible. It and the Mental Deficiency Bill for England were similar in their main objects, but there were differences owing to the different circumstances of the local authorities of the two countries.

Small-pox Hospital at Kirkcaldy.

Mr. WARDLE asked the Secretary for Scotland whether his attention had been called to the outbreak of small-pox at Kirkcaldy at the latter end of last year and to the position of the small-pox hospital, which was alleged to be a danger to railway servants at their work, and what he proposed to do in the matter.—Mr. MCKINNON WOOD answered: The Local Government Board for Scotland are of opinion that this small-pox hospital may be a possible source of infection, and are communicating with the local authorities with a view to other arrangements being made for the reception of small-pox patients.

Small-pox in 1912.

Mr. BURNS (President of the Local Government Board) informed Mr. J. PARKER that there had been no exceptional prevalence of small-pox in England and Wales in 1912 and this year.

MONDAY, APRIL 7TH.

Sanatorium Accommodation at Nayland.

Mr. BURNS (President of the Local Government Board) informed Mr. WORTHINGTON EVANS that an application had been received for a grant for the erection of sanatorium accommodation at Nayland, and that the proposal was now under consideration.

Scottish Clerks' Association and Medical Benefit.

In reply to Mr. WATT, Mr. J. M. ROBERTSON (on behalf of the Secretary to the Treasury) said the special medical scheme of the Scottish Clerks' Association had not at any time been approved by the Insurance Commissioners, and no question therefore arose of withdrawing approval. The Commissioners know of nothing to prevent the Scottish Clerks' Association from working a scheme for additional medical benefit on the private side with free choice of their members, for ordinary attendance amongst panel doctors or (where the Local Insurance Committee permits it) amongst non-panel doctors also.

Medical Attendance under the National Insurance Act in Hull.

Replying to Mr. P. HALL (Dulwich), Mr. J. M. ROBERTSON (on behalf of the Secretary to the Treasury) stated that the number of medical men on the panel for Hull was 77 and the number of insured persons approximately 89,000.

Medical Certificates for Sickness Benefit.

In answer to Sir WILLIAM BULL, Mr. J. M. ROBERTSON (on behalf of the Secretary to the Treasury) said that the acceptance or refusal of a certificate of any particular medical practitioner for the purpose of administering sickness benefit was in the first instance for the Approved Society to decide, subject to a right of the insured person to appeal to the Insurance Commissioners under Section 67 of the National Insurance Act. It was not the case that the Government auditors would look to the secretary of an Approved Society to refund money paid on the certificate of non-panel medical men as having been money unlawfully paid away.

Supply of Drugs for Insured Persons.

Mr. KING asked the Secretary to the Treasury whether he was aware of the offence proved against a firm of chemists in Staffordshire, who sold to an Insurance Committee a number of pills not in accordance with the prescription; whether Insurance Committees were empowered to strike off the list any chemists convicted of such offences; and whether the Insurance Commissioners would occasionally test the medicines and pills supplied and so ensure their proper composition and efficacy.—Mr. J. M. ROBERTSON (on behalf of Mr. MASTERMAN) replied: The Commissioners have seen a report of the case referred to. If any representations are made to them that the inclusion or continuance on the panel of any chemist will be prejudicial to the efficiency of the service they may, after inquiry, exclude or remove such chemist from the panel. With regard to the third part of the question, it is the duty of the Insurance Committee to take such steps as may be necessary to secure a proper and efficient supply of drugs and medicines for the insured persons in their area.

Unsatisfactory Housing Conditions in Hitchin.

Replying to Sir HENRY HAVELOCK-ALLEN, Mr. BURNS (President of the Local Government Board) said: I am aware that in some parts of the urban district of Hitchin the housing conditions are very unsatisfactory, and I have for some time past been in correspondence with the district council in relation to the Queen-street area of the district with a view to action being taken by the council to remedy the conditions in that area by making an improvement scheme under the Housing of the Working Classes Act, 1890. I have addressed a further letter to the council on the subject.

TUESDAY, APRIL 8TH.

Medical Treatment of School Children in Scotland.

Replying to Mr. JAMES HOGGE, Mr. MCKINNON WOOD (Secretary for Scotland) said: The only legislation which I contemplate for this session in connexion with the Education Acts is a Bill to give additional power to the school boards to provide for medical treatment in Scotland.

WEDNESDAY, APRIL 9TH.

Arrangements for Medical Treatment under the National Insurance Act.

Mr. NEWMAN asked the Chancellor of the Exchequer whether it had been brought to his notice that Insurance Committees, in refusing applicants desirous of making their own medical arrangements, were in the habit of assigning no reason for their inability to comply with the request of the insured person, but merely warned the applicant that, failing making a selection by March 31st, he would be liable to distribution among doctors on the panel; and whether, in view of the fact that each application was considered on its merits, he would explain why the reason for refusal was not stated in the reply.—Mr. ROBERTSON (on behalf of the Chancellor of the Exchequer) replied: An Insurance Committee is under no obligation to explain in each individual case the reasons for refusing an application from an insured person for permission to make his own arrangements for medical attendance and treatment. The general policy which I believe is guiding the Insurance Committees in dealing with such applications is indicated in the memorandum on the subject issued by the Commissioners.

BOOKS, ETC., RECEIVED.

OFFICE OF THE SURGEON-GENERAL, Army Medical Museum and Library, Washington, U.S.A.

Index-Catalogue of the Library of the Surgeon-General's Office, United States Army. Authors and Subjects. Second Series. Vol. XVII. Suahell—Testut. Price not stated.

OPHTHALMOSCOPE PRESS, THE (GEORGE PULMAN AND SONS, LTD.), 24–27, Thayer-street, Manchester-square, London, W.

Sclero-Corneal Trephining in the Operative Treatment of Glaucoma. By Robert Henry Elliot, M.D., B.S. Lond., Sc.D. Edin., F.R.C.S. Eng., &c., Lieut.-Colonel, I.M.S., Superintendent of the Government Ophthalmic Hospital, Madras.

PITMAN, SIR ISAAC AND SONS, LIMITED, London.

Astonishing Anatomy! By Tingle. Price 1s. net.

POINAT, A., 121, Boulevard Saint-Michel, Paris.

La Biologie Synthétique. Par Stéphane Leduc, Professeur à l'École de Médecine de Nantes. Price not stated.

ROYAL COLLEGE OF PHYSICIANS, Pall Mall East, London, S.W.

List of the Fellows, Members, Extra-Licentiates and Licentiates of the Royal College of Physicians of London. MCMXIII. Price not stated.

SCIENTIFIC PRESS, LIMITED, 28 and 29, Southampton-street, Strand, London, W.C.

Gynæcology for Nurses and Gynæcological Nursing. By Comyns Berkeley, M.A., M.D., B.C. Cantab., F.R.C.P. Lond., M.R.C.S. Eng., Obstetric and Gynæcological Surgeon to the Middlesex Hospital. Second edition, enlarged and revised. Price 2s. 6d. net.

The Care of Children. Practical Hints for Mothers and Nurses at Home and Abroad. By Robert J. Blackham, D.P.H. Lond., Hon. Surgeon to His Excellency the Viceroy and Governor-General of India, Major, Royal Army Medical Corps. Third edition. Price 1s. 6d. net.

THIEME, GEORG, Leipzig.

Die Leberkrankheiten. Für Studierende und Aerzte. Bearbeitet von Dr. C. A. Ewald, Geh. Med.-Rat, Professor ord. hon. an der Kgl., Friedrich-Wilhelm-Universität. Price, paper, M.10; bound, M. 11.

UNIVERSITY PRESS, Cambridge.

The Atmosphere. By A. J. Berry, M.A., Lecturer in Chemistry at Downing College. Price 1s. net.

The Story of a Loaf of Bread. By T. B. Wood, M.A., Drapers Professor of Agriculture in the University of Cambridge. Price 1s. net.

URBAN UND SCHWARZENBERG, Berlin und Wien.

Technik der ärztlichen Massage. Für praktische Aerzte. Von Dr. Anton Bum, Privatdozent an der Wiener Universität. Price M. 3.40.

Ueber die Pathogenese der Salvarsantodesfälle. Von Dr. Wilhelm Wechselmann, dirigierendem Arzt der dermatologischen Abteilung im Rudolf Virchow-Krankenhaus in Berlin. Price M. 4.

Handbuch der Speziellen Pathologie des Harns. Von Dr. med. Ferdinand Blumenthal, Universitätsprofessor in Berlin. Price, paper, M. 15; bound, M. 17.

Innere Sekretion. Ihre physiologischen Grundlagen und ihre Bedeutung für die Pathologie. Von Prof. Dr. Artur Biedl, Wien. Mit einem Vorwort von Hofrat Prof. Dr. R. Paltauf, Wien. Zweite, neubearbeitete Auflage. Erster Teil. Price, paper, M. 24; bound, M. 26.

Atlas der Hautkrankheiten, mit Einschluss der wichtigsten Venerischen Erkrankungen. Für praktische Aerzte und Studierende. Von Dr. E. Jacobi, A.O. Professor und Direktor der Dermatologischen Universitäts-Klinik in Freiburg i. Br. Fünfte Auflage. Zwei Bände. Price, paper, M. 45; bound, M. 50.

L. Landois' Lehrbuch der Physiologie des Menschen mit besonderer Berücksichtigung der praktischen Medizin. Dreizehnte Auflage. Bearbeitet von Dr. R. Rosemann, a.ö. Professor der Physiologie und Direktor des physiologischen Instituts der Westfälischen Wilhelms-Universität zu Münster. Erster Band. Price, paper, M. 9; bound, M. 10.

Fortschritte der Naturwissenschaftlichen Forschung. Herausgegeben von Prof. Dr. Emil Abderhalden, Direktor des physiologischen Institutes des Universität Halle a. S. Siebenter Band. Price, paper, M. 15; bound, M. 17.

VOGEL, F. C. W., Leipzig.

Spezielle Chirurgische Diagnostik. Für Studierende und Aerzte. Bearbeitet von Dr. F. de Quervain, O. O. Professor der Chirurgie und Direktor der chirurgischen Universitätsklinik in Basel. Vierte, vervollständigte Auflage. Price, paper, M. 18; bound, M. 20.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, such information for gratuitous publication.

BLOOM, A., M.B., Ch.B. Edin., has been appointed House Physician at the Hampstead General Hospital.

BOYD, F. D., C.M.G., M.D. Edin., F.R.C.P. Edin., has been appointed Physician to the Edinburgh Royal Infirmary.

CARRICK, JAMES, M.B., B.S. Glasg., has been appointed Assistant Medical Officer of Health of the Burgh of Paisley.

COMRIE, J. D., M.D. Edin., F.R.C.P. Edin., has been appointed Assistant Physician to the Edinburgh Royal Infirmary.

ERLANK, JAMES, M.B., Ch.B. Edin., has been appointed House Surgeon at the Hampstead General Hospital.

FREEMAN, J., M.D. Durh., F.R.C.S. Edin., has been reappointed Anæsthetist to the Bristol General Hospital.

GRAHAM, LEWIS, M.B., M.S. Lond., F.R.C.S. Eng., has been appointed Honorary Surgeon and Registrar to the Birmingham and Midland Hospital for Women.

LAMBIE, JOHN, M.D. Glasg., D.P.H., has been appointed Medical Officer of Health of the Borough of Mansfield, Notts.

MACKENZIE, IVY, M.D. Glasg., has been appointed Visiting Physician to the Victoria Infirmary, Glasgow.

MCNAIR, A. J., M.B., B.C., has been appointed Clinical Assistant to the Chelsea Hospital for Women.

MANSFIELD, P. A., M.B., B.Ch. Oxon., has been appointed Certifying Surgeon under the Factory and Workshop Acts for the Sevenoaks District of the county of Kent.

MORTON, C. A., F.R.C.S. Eng., has been reappointed Surgeon to the Bristol General Hospital.

OSMOND, CHARLES HOLDWAY, L.F.P.S. Glasg., L.S.A. Lond., has been appointed Medical Officer to the Ilfracombe District by the Barnstaple (Devon) Board of Guardians.

PARKIN, ALFRED, M.D. Durh., F.R.C.S. Eng., M.R.C.P. Lond, has been appointed Honorary Physician to the Royal Victoria Infirmary, Newcastle-on-Tyne.

ROWNTREE, CECIL, M.B., B.S. Lond., F.R.C.S. Eng., has been appointed Surgeon to the St. Marylebone General Dispensary.

ROY, DONALD W., M.B., B.C. Cantab., F.R.C.S. Eng., has been appointed Assistant Surgeon to the Samaritan Free Hospital for Women.

STEPHENSON, SYDNEY, D.O. Oxon., has been appointed Ophthalmic Surgeon to King Edward Memorial Hospital, Ealing, W.

STOPFORD, J. S. B., M.B., Ch.B. Manch., has been appointed Senior Demonstrator of Anatomy in the University of Manchester.

STRACHAN, G. I., M.B., Ch.B. Glasg., has been appointed House Physician at the Bristol Royal Infirmary.

SUTCLIFFE, W. H., L.K.Q.C.P.I., L.F.P.S. Glasg., has been appointed Certifying Surgeon under the Factory and Workshop Acts for the Lisbellaw District of the county of Fermanagh.

WALLACE, J. M., M.R.C.S., L.R.C.P. Lond., has been appointed Assistant Casualty Officer at the Camden Town Branch of the Hampstead General Hospital.

WATSON, J. K., M.D., C.M. Edin., has been appointed Certifying Surgeon under the Factory and Workshop Acts for the Stevenage District of the county of Hertford.

WHITE, HUGH, M.B., Ch.B. Glasg., has been appointed Assistant Surgeon to the Royal Albert Hospital, Devonport.

WILSON, IVAN S., M.D., F.R.C.S., has been appointed Clinical Assistant to the Chelsea Hospital for Women.

WRIGHT, A. J., M.B., B.S. Lond., F.R.C.S. Eng., has been appointed Surgeon to the Nose and Throat Department at the Bristol General Hospital.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

ABERYSTWYTH INFIRMARY AND CARDIGANSHIRE GENERAL HOSPITAL.—House Surgeon and Secretary. Salary £150 per annum, with board and washing.

BANBURY, HORTON INFIRMARY.—House Surgeon. Salary £80 per annum, with board and residence.

BELGRAVE HOSPITAL FOR CHILDREN, Clapham-road, S.W.—Junior Resident Medical Officer. Salary at rate of £40 per annum, with board, residence, &c. Also Assistant Physician.

BENENDEN, NATIONAL SANATORIUM, Kent.—Medical Superintendent. Salary £300 per annum, with residence, board, and laundry.

BIRKENHEAD BOROUGH HOSPITAL.—Junior House Surgeon. Salary £80 per annum, with board and laundry.

BIRMINGHAM AND MIDLAND EYE HOSPITAL.—Third House Surgeon. Salary £75 per annum, with board, rooms, &c.

BIRMINGHAM GENERAL DISPENSARY.—Resident Surgeon, unmarried. Salary £200 per annum, with rooms, fire, light, and attendance.

BIRMINGHAM, QUEEN'S HOSPITAL.—House Surgeon for six months. Salary at rate of £50 per annum, with board, lodging, and washing.

BIRMINGHAM, RUBERY HILL ASYLUM.—Junior Assistant Medical Officer. Salary £175 per annum, with apartments, board, and washing.

BOURNEMOUTH, ROYAL VICTORIA AND WEST HANTS HOSPITAL.—Assistant Surgeon to Nose, Throat, and Ear Department.

BRIDGWATER HOSPITAL.—House Surgeon, unmarried, for six months. Salary at rate of £100 per annum, with board, lodging, and washing.

BRIGHTON AND HOVE HOSPITAL FOR WOMEN.—House Surgeon, unmarried, for six months. Salary £80 per annum, with apartments, board, attendance, &c.

BRISTOL, COSSHAM MEMORIAL HOSPITAL, Kingswood.—House Surgeon. Salary £50 per annum, with board, lodging, and washing.

BRISTOL GENERAL HOSPITAL.—First House Physician, Second House Physician, and Casualty House Surgeon for six months. Salary £80 per annum, with board, residence, &c.

BRISTOL ROYAL INFIRMARY.—Obstetric and Ophthalmic House Surgeon for six months. Salary at rate of £75 per annum, with board, laundry, and apartments. Also Resident Casualty Officer for six months. Salary at rate of £50 per annum, with board, apartments, and laundry.

BROMSGROVE, WORCESTERSHIRE ASYLUM, Barnsley Hall.—Second Assistant Medical Officer. Salary £150 per annum, with quarters, board, washing, and attendance.

BUXTON, DEVONSHIRE HOSPITAL, Derbyshire.—Assistant House Physician for six months. Salary £100 per annum, with apartments, board, and laundry.

CANTERBURY BOROUGH ASYLUM.—Assistant Medical Officer, unmarried. Salary £160 per annum, with board, lodging, washing, and attendance. Also Locum Tenent Assistant Medical Officer. Salary £4 4*s.* a week, with emoluments as above.

CARLISLE, CUMBERLAND AND WESTMORLAND ASYLUM, Garlands.—Junior Assistant Medical Officer. Salary £150 per annum, with board, apartments, and washing.

CHARING CROSS HOSPITAL.—Anæsthetist.

CHESTERFIELD AND NORTH DERBYSHIRE HOSPITAL.—House Physician. Salary £80 per annum, with board, apartments, and laundry.

DARTFORD, DARENTH INDUSTRIAL COLONY, Kent.—Third Assistant Medical Officer, unmarried. Salary £150 per annum, with board, lodging, and washing.

DENBIGH, DENBIGHSHIRE INFIRMARY.—House Surgeon. Salary £100 per annum, with board, residence, and washing.

DEVONPORT, ROYAL ALBERT HOSPITAL.—Assistant House Surgeon, unmarried. Salary at rate of £75 per annum, with board and laundry.

DORCHESTER, DORSET COUNTY ASYLUM.—Third Assistant Medical Officer. Salary £200 per annum and all found.

DUBLIN, COMMISSIONERS OF IRISH LIGHTS.—Medical Officer in Kingstown District.

DUDLEY, GUEST HOSPITAL.—Assistant House Surgeon for six months. Salary £100 per annum, with residence, board, and washing.

DURHAM COUNTY HOSPITAL.—House Surgeon. Salary £120 per annum, with board and lodging.

EDINBURGH SCHOOL BOARD.—Assistant Medical Officer. Salary at rate of £300 per annum.

EXETER, ROYAL DEVON AND EXETER HOSPITAL.—Assistant House Surgeon for six months. Salary at rate of £80 per annum, with board, apartments, and washing.

EXMINSTER, DEVON COUNTY ASYLUM.—Fourth Assistant Medical Officer. Salary £130 per annum.

GREAT YARMOUTH HOSPITAL.—House Surgeon, unmarried. Salary £100 per annum, with board, lodging, and washing.

GRIMSBY AND DISTRICT HOSPITAL.—Senior House Surgeon and Junior House Surgeon. Salary £100 and £80 per annum respectively, with board, lodging, attendance, and washing.

HALIFAX, ROYAL HALIFAX INFIRMARY.—Third House Surgeon, unmarried. Salary £80 per annum, with residence, board, and washing.

HASTINGS, EAST SUSSEX HOSPITAL.—Senior House Surgeon. Salary £100 per annum, with residence, board, and washing. Also Assistant House Surgeon. Salary at rate of £70 per annum, with residence, board, and washing.

HELLINGLY, EAST SUSSEX COUNTY ASYLUM.—Third Assistant Medical Officer, unmarried. Salary £200 per annum, with board, apartments, washing, and attendance.

HEMEL HEMPSTEAD, WEST HERTS HOSPITAL.—Resident Medical Officer. Salary £100 per annum, with rooms, board, and washing.

HOLBORN UNION INFIRMARY, Archway-road, Upper Holloway, N.—Second Assistant Medical Officer. Salary £100 per annum, with board, apartments, and washing.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—House Physician for six months. Salary 30 guineas.

HOSPITAL FOR EPILEPSY AND PARALYSIS AND OTHER DISEASES OF THE NERVOUS SYSTEM, Maida Vale, W.—Resident Medical Officer for six months. Salary at rate of £50 per annum, with board, lodging, and washing.

HOSPITAL FOR SICK CHILDREN, Great Ormond-street, London, W.C.—Assistant Casualty Medical Officer, unmarried, for six months. Salary £30, with, board, residence, &c.

HUDDERSFIELD ROYAL INFIRMARY.—Junior Assistant House Surgeon. Salary £60 per annum, with board, residence, and washing.

INFECTIOUS HOSPITALS SERVICE OF THE METROPOLITAN ASYLUMS BOARD.—Junior Assistant Medical Officers, unmarried. Salary £180 per annum, with board, lodging, and washing.

LEAMINGTON SPA, WARNEFORD, LEAMINGTON, AND SOUTH WARWICKSHIRE GENERAL HOSPITAL AND MIDLAND COUNTIES BATHING INSTITUTION.—House Physician. Salary £85 per annum, with board, residence, and laundry.

LEEDS GENERAL INFIRMARY.—Resident Obstetric Officer for six months. Salary £50 per annum, with board, residence, and laundry. Also Two House Surgeons without salary, but with board, residence, and laundry.

LEICESTER ROYAL INFIRMARY.—Honorary Surgeon and Assistant Honorary Surgeon. Also Assistant House Surgeon and Assistant House Physician for six months. Salary at rate of £80 per annum, with board, apartments, and washing.

LEYTON, WALTHAMSTOW, AND WANSTEAD CHILDREN'S AND GENERAL HOSPITAL.—Resident House Surgeon. Salary £100 per annum, with rooms, board, and washing.

LIVERPOOL STANLEY HOSPITAL.—House Surgeon. Salary £75 per annum, with board, residence, and laundry.

MACCLESFIELD, CHESHIRE COUNTY ASYLUM, Parkside.—Temporary Assistant Medical Officer for three or four months. Salary £4 4*s.* per week, with apartments, board, and washing.

MANCHESTER, MONSALL FEVER HOSPITAL.—Third Medical Assistant. Salary £100 per annum, with board, lodgings, and washing.

MANCHESTER NORTHERN HOSPITAL FOR WOMEN AND CHILDREN, Park-place, Cheetham Hill-road.—Senior and Junior House Surgeons. Salaries £120 and £100 per annum respectively, with apartments and board.

MANCHESTER ROYAL INFIRMARY.—Assistant Surgical Officer in Aural Department. Salary £35 per annum.

MANCHESTER WORKHOUSE, Crumpsall.—Junior Assistant Medical Officer, unmarried. Salary £110 per annum, with rations, apartments, washing, attendance &c.

METROPOLITAN HOSPITAL, Kingsland-road, N.E.—Pathologist and Registrar. Salary at rate of £120 per annum. Also House Physician, House Surgeon, Assistant House Physician, and Assistant House Surgeon for six months. Salary of House Physician and House Surgeon at rate of £60 per annum, with full board and washing. Salary of Assistant House Physician and Assistant House Surgeon at rate of £40 per annum, with full board and washing. Also Physician and Assistant Physician.

NESTING AND LUNNASTING PARISH COUNCIL.—Medical Officer. Salary £50 per annum.

NEWCASTLE-ON-TYNE DISPENSARY.—Vacancies on the Visiting Medical Assistants' Staff. Salary £160 per annum.

NEWCASTLE-ON-TYNE HOSPITAL FOR SICK CHILDREN.—Junior House Surgeon. Salary £80 per annum, with board, lodging, and laundry.

NEWPORT AND MONMOUTHSHIRE HOSPITAL.—Resident Medical Officer. Salary at rate of £100 per annum, with board, residence, and laundry.

NORWICH, NORFOLK AND NORWICH HOSPITAL.—Casualty Officer for six months. Salary £80 per annum, with board, lodging, and washing. Also House Surgeon. Salary £80 per annum, with board, lodging, and washing.

NOTTINGHAM GENERAL DISPENSARY.—Assistant Resident Surgeon. Salary £170. Also Resident and Assistant Resident Surgeons for Branch. Salaries £180 and £170 per annum respectively, with apartments, attendance, light, and fuel.

NOTTINGHAM, THE COPPICE.—Resident Medical Superintendent. Salary £750 per annum, with apartments, board, attendance, &c.

OLDHAM COUNTY BOROUGH.—Assistant School Medical Officer. Salary £260 per annum.

OXFORD, WARNEFORD MENTAL HOSPITAL.—Assistant Medical Officer. Salary £150 per annum, with apartments, board, attendance, and laundry.

PADDINGTON-GREEN CHILDREN'S HOSPITAL, London, W.—House Physician and House Surgeon for six months. Salary in each case at rate of £52 10*s.* per annum, with board and residence.

PORTSMOUTH BOROUGH.—Assistant School Medical Officer. Salary at rate of £250 per annum.

PORTSMOUTH INFIRMARY, WORKHOUSE, AND CHILDREN'S HOME.—Second Assistant Resident Medical Officer, unmarried. Salary £120 per annum, with apartments, rations, &c.

PRESTON, COUNTY ASYLUM, Whittingham.—Assistant Medical Officer, unmarried. Salary £150 per annum, with board, apartments, and washing.

PRESTON ROYAL INFIRMARY.—Senior House Surgeon, unmarried, for six months. Salary £80 per annum, with board, residence, and washing.

QUEEN'S HOSPITAL FOR CHILDREN, Hackney-road.—House Physician and House Surgeon for six months. Salary at rate of £80 per annum, with board, residence, and washing.

READING, ROYAL BERKSHIRE HOSPITAL.—Second House Surgeon for six months. Salary £80 per annum, with apartments, board, and washing.

RHONDDA URBAN DISTRICT COUNCIL.—Assistant Medical Officer of Health. Salary at rate of £250 per annum.
RICHMOND, SURREY, ROYAL HOSPITAL.—Assistant House Surgeon. Salary £70 per annum, with board and apartments.
ROCHDALE INFIRMARY.—Two House Surgeons, unmarried. Salaries £80 and £100 per annum respectively, with board, residence, and laundry.
ROTHERHAM HOSPITAL AND DISPENSARY.—Assistant House Surgeon. Salary £80 per annum, with board, lodging, and washing.
ROYAL ARMY MEDICAL CORPS.—Commissions.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Examiners.
ROYAL LONDON OPHTHALMIC HOSPITAL, City-road, E.C.—Third House Surgeon. Salary at rate of £50 per annum, with board and residence.
ST. GEORGE'S HOSPITAL, S.W.—Assistant Physician.
SALFORD COUNTY BOROUGH EDUCATION COMMITTEE.—Assistant School Medical Officer. Salary £250 per annum.
SAMARITAN FREE HOSPITAL FOR WOMEN, Marylebone-road, N.W.—Assistant Surgical Registrar for six months
SCARBOROUGH HOSPITAL AND DISPENSARY.—Senior House Surgeon. Salary £100 per annum, with residence, board, &c. Also Junior House Surgeon for six months. Salary £80 per annum, with residence, board, &c.
SHEFFIELD, JESSOP HOSPITAL FOR WOMEN.—Senior and Assistant House Surgeons, unmarried. Salaries £80 and £60 per annum respectively, with board, residence, and laundry.
SHEFFIELD ROYAL HOSPITAL.—Assistant House Physician, unmarried. Salary £60 per annum, with board, lodging, and washing.
SHEFFIELD ROYAL INFIRMARY.—Two House Surgeons. Salary £80 per annum. Also Junior House Surgeon. Salary £70 per annum. Also Assistant House Physician. Salary £70 per annum. With board and residence.
SOUTHAMPTON, FREE EYE HOSPITAL.—House Surgeon. Salary £100 per annum, with board, lodging, and laundry.
SOUTH SHIELDS, INGHAM INFIRMARY AND SOUTH SHIELDS AND WESTOE DISPENSARY.—Senior and Junior House Surgeons. Salaries £100 and £90 per annum respectively, with residence, board, and washing.
WEST BROMWICH AND DISTRICT HOSPITAL.—Assistant Resident House Surgeon and Anæsthetist, unmarried. Salary £75 per annum, with board, residence, and washing.
WEST HARTLEPOOL, CAMERON HOSPITAL.—House Surgeon. Salary £120 per annum, with board, rooms, laundry, &c.
WILLESDEN URBAN DISTRICT EDUCATION COMMITTEE.—Treatment of Cases of School Children suffering from Ringworm. Salary £100 per annum.
WINCHESTER, ROYAL HAMPSHIRE COUNTY HOSPITAL.—House Surgeon. Salary £80 per annum.
WISBECH, NORTH CAMBRIDGESHIRE HOSPITAL.—Resident Medical Officer. Salary £150 per annum, with unfurnished house, free of rent and rates.
WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—Resident Medical Officer. Salary at rate of £100 per annum, with board, rooms, and laundry.

THE Chief Inspector of Factories, Home Office, London, S.W., gives notice of vacancies for Certifying Surgeons under the Factory and Workshop Acts at Lochee, in the county of Forfar; at Clwtybont, in the county of Carnarvon; and at Sileby, in the county of Leicester.
THE Home Secretary gives notice of a vacancy for a Medical Referee under the Workmen's Compensation Act, 1906, for the Counties of Elgin and Nairn.

Births, Marriages, and Deaths.

BIRTHS.

ELLIS.—On March 30th, at Maple-road, Bournville, Birmingham, the wife of F. W. Ellis, M.D., F.R.C.S., of a son.
HIGHET.—On April 3rd, at Bangkok, Siam, the wife of H. Campbell Highet, M.D., D.P.H., Principal Medical Officer, Local Government, of a son.
THOMPSON.—On April 4th, at Tutshill, Chepstow, to the wife of Cecil C. B. Thompson, M.R.C.S., L.R.C.P., a daughter.
WHEELER.—On April 5th, at North-street, Rugby, the wife of J. Norman Wheeler, M.B., B.C., of a daughter.
WITNEY.—On March 31st, at Cromwell House, Whitstable, to Dr. and Mrs. Witney, a son.

MARRIAGES.

DEE—KELLY.—On April 2nd, at the Catholic Church, Clacton-on-Sea, Joseph Patrick Dee, M.D., to Margery, eldest daughter of M. S. Kelly, Walton-on-Naze.
FORSTER—ROWE.—On April 3rd, at St. James's, Piccadilly, Charles Michael Forster, B.A. Cantab., M.R.C.S., L.R.C.P., to Mary Margaretta, second daughter of the late Almond Rowe, Straits Settlements Civil Service.
WEST—FINCHETT.—On April 3rd, at All Saints', Margaret-street, W., by the Rev. Wilfrid Moor, Henry Owen West, M.D., eldest son of the Rev. John O. and Mrs. West, of Wednesbury, to Annie, third daughter of the late William Henry Finchett and Mrs. Finchett, of Chester.

DEATHS.

DAWSON.—On April 1st, from heart failure and pneumonia, Rankine Dawson, M.D., aged 55.
HARVEY.—On April 4th, at Headley, Hants, after much suffering, Emily Margaret Viola, aged 21 years, only daughter of Sidney Harvey, 117A, Queen's-gate, S.W. Indian and colonial papers please copy.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

Notes, Short Comments, and Answers to Correspondents.

PUBLIC-HOUSE REFORM.

IN THE LANCET of Oct. 19th, 1912, we called attention to a little pamphlet on the Public-House Trust, an organisation having for its object the checking of intemperance by elevation of the status and morals of the public-house, by restoring it to its proper place as a house of refreshment rather than a mere drinking shop. We have now before us a book entitled "Public-House Reform," issued by the People's Refreshment House Association, of Broadway Chambers, Westminster, both the book and the institution having a kindred purpose to that of the Public-House Trust. The association, which was registered under the Industrial and Provident Societies Act, 1893, was founded by Colonel Craufurd and the Bishop of Chester in 1896, and has for its object the acquiring of suitable public-houses and the placing of them under the charge of its own managers. The houses are conducted on the lines of respectable houses of refreshment instead of as mere drinking bars; food and non-intoxicants are exposed for sale on an equal footing with intoxicants. The manager is relieved from any temptation to push the sale of intoxicants from the fact that he is charged the full retail price for all alcoholic drinks consumed, whereas he is supplied with non-alcoholic drinks and food at a wholesale rate, which enables him to make a profit thereon. Great care is taken to avoid the adulteration of liquor. The invested capital is entitled out of profits to a dividend not exceeding 5 per cent. per annum, any surplus, after providing for a reserve fund, being devoted to objects of public utility, local or general. The first inn taken over was one at Sparkford, Somerset, in October, 1897. The growth of the association may be seen in the fact that whereas at the beginning of 1901 it controlled 14 houses, it now controls 113. The maximum dividend has been earned continuously since 1899, the assets have increased from £3500 to nearly £100,000, and the reserve fund stands at £3600. Every house has a comfortable tea-room distinct from the bar, and most have tea-gardens, many of them having also well-furnished bedrooms. There are, of course, no "tied" houses. There are frequent inspections at irregular intervals, and while prominent attention is called by notices to non-alcoholic beverages and foods, no advertisement of intoxicating liquors occurs except in the necessary price lists. A perusal of the instructions to managers indicates the great care taken to maintain the supremacy of the purposes for which the association exists, and there is abundant testimony forthcoming of the elevating tendency of the work in those districts where it is in operation. The book contains a list, by counties, of the inns and hotels under the association's management, with particulars of the house and neighbourhood, and distance from the nearest station, and the pictures of many of them make quite an attractive appearance. The statement is made that "It is quite obvious that public-houses will always be with us, and the principal question is therefore whether they shall be conducted on a good or a bad system," and since experience proves that the reduction of public-houses is generally followed by the rise of drinking clubs, which cannot be easily controlled, there seems little doubt that this and the kindred associations, of which there are several, catering especially to the particular local needs of different districts, are deserving of every support.

"THE RISING OF THE LIGHTS."

To the Editor of THE LANCET.

SIR,—May I refer "G. S. M." and the author of your annotation on Enterotaxis to Graunt's "Observations on the Late Bills of Mortality." This little book was first published, I think, in 1662. In it will be found the statement that there had recently appeared in England two new and fatal diseases, "the Rising of the Lights and the Stopping of the Stomach." The association suggests the symptoms of eructation and distension. The term "rising of the lights" was, I believe, applied to any grave disorder of unknown origin in which these symptoms were prominent. The suggested pathology was, of course, based on an erroneous conception.

The book itself is otherwise of interest as one of the earliest contributions in this country to the science of statistics. It contains several remarkable passages, among them a prophecy of the industrial revolution to follow the widespread use of "stone-coal." The author also sets forth observations on and deductions from the rapid growth of London, where already, at that early date, Ludgate Hill is described as "a throat too strait for the body."

All the above is quoted from memory, as I cannot here consult either the work itself or references to it. The identity, however, of this writer on the "rising of the lights" is still, I believe, uncertain. Graunt was one of the early Fellows of the Royal Society and is mentioned by contemporary writers, including both Pepys and Evelyn. In Evelyn's

Diary, in the entry for March 22nd, 1675, is a delightful description of a supper at the house of Sir William Petty. Evelyn gives an account of Petty's life, terminating with the remark: "He [Petty] is the author of the ingenious deductions from the bills of mortality which go under the name of Mr. Graunt. ..... He was also author of that paraphrase on the 104th Psalm in Latin verse which goes about in MS. and is inimitable. In a word, there is nothing impenetrable to him." Burnet also remarks ("Own Times," Vol. I., p. 401, ed. 1823) that "Sir William Petty published his Observations on the Bills of Mortality in the name of one Grant, a papist." There are, indeed, many passages in the "Observations" which suggest the authorship of Petty.

Petty himself was a man of humble origin, but of vast and varied abilities. He was the author of the "Political Arithmetic," and was the father of statistical science. That study, however, formed but a fraction of his activity. Thus he was professor of anatomy at Oxford and of music at Gresham College! Later he became physician to the army in Ireland, and he subsequently took part in the Commission for the division of the lands forfeited by the Irish rebels. Manuscripts in Petty's handwriting relating to this Commission have, I believe, been presented to Oxford University by Sir William Osler, who recently read a paper on Petty before the Historical Section of the Royal Society of Medicine (THE LANCET, Nov. 30th, 1912, p. 1504).

It would be interesting to know whether any reference to the "rising of the lights" earlier than that of Petty or Graunt is known to your readers.

I am, Sir, yours faithfully,

Heidelberg, March 31st 1913. CHARLES SINGER.

To the Editor of THE LANCET.

SIR,—If "Rising of the Lights" as a popular phrase stands for "dyspepsia" in Lancashire, or for "emphysema" or "displacement of organs" in Scotland or other places where the masses may be scientifically educated, in London it stands, or at least used to stand, for "profuse expectoration" or "a power of *spit*." (Spitalfields, the parish of Dr. H. Stone's father, may possibly have been an exceptionally enlightened district at the time referred to by Dr. Ackerley in his letter in your issue of April 5th, and thus may have corrected the prevalent London vernacular. I knew Dr. Stone well, however; but among his many tales and witticisms I never heard this rendering of the familiar phrase in question.)

From my student days to the time when I ceased to see out-patients in the East of London I frequently heard this magniloquent phrase, which always indicated "spit" as a *fact*, but "lung disease," or "consumption," as the patient's *diagnosis*.

I am, Sir, yours faithfully,

Ventnor, April 5th, 1913. H. BRYAN DONKIN.

To the Editor of THE LANCET.

SIR,—The many communications that have appeared in THE LANCET in response to the question mooted in your annotation of March 15th have not removed that question from the region of conjecture. I submit that, as far as affecting horned cattle at any rate, the following heading to one of the sections in an old book is unequivocal: "Of the Inflammation of the Lungs, commonly called the rising of the Lights." The book is entitled, "A Treatise on the Disorders incident to Horned Cattle," its author's name is Thomas Rowlands, and it was printed at Bangor by John Broster in 1812. "Rising in the Body," mentioned in the annotation as given in Bailey's Dictionary, 1737, as the name of a distemper in cattle, is not among Rowlands's disorders.

I am, Sir, yours faithfully,

April 8th, 1913. W. R.

HEALTH OF ST. LUCIA.

ACCORDING to the report on the Blue-book of St. Lucia for the year 1911-12, just presented to Parliament, the estimated population of the colony on March 31st, 1912, was 49,205—22,521 males and 26,684 females. The birth-rate for the year ended on the same date was 35·5 per 1000 and the death-rate 20·2 per 1000, still-births being excluded in each case. There were 251 marriages during the year. All the medical officers report the health of the colony during the year to have been generally satisfactory, with the exception that in the Castries, Soufrière, and Vieux Fort districts there were outbreaks among children of measles and whooping-cough, whilst a sharp outbreak of influenza occurred in Castries during the month of February. Sanitary matters received strict attention during the year, and the work continues to be well carried out. The heavy rains, it was found, washed out the "millions" fish that had been distributed in certain localities to keep down the number of mosquitoes. The places were at once re-stocked, and the fish soon regained their former numbers. The average rainfall at 20 stations in the year 1911 was 114·01 inches. The mean monthly temperature in the shade was 78·4°F; the maxium shade temperature was 92° on Sept. 16th and the minimum 60° on Feb. 19th.

The only general hospital in the colony is the Victoria Hospital, within half a mile of Castries, a large stone building with outhouses, &c., capable of accommodating 80 patients. The daily average during 1911-12 was 65, and the cost worked out at £26 per head. Considerable outlay has been incurred latterly in connexion with this institution in an attempt to improve and uplift the tone and condition generally, which is meeting with fair success. In the town of Soufrière and at the villages of Vieux Fort and Dennery, where there are resident medical officers, small buildings are provided and fitted to serve the purposes of casualty hospitals, and as such are very useful. There are seldom more than two or three cases under treatment at a time at these places, and often they are empty. Situated on a breezy spot near the sea beach within a mile of the town of Soufrière is the general poor asylum, which takes in and makes good provision for the human wreckage of the colony, the majority of which drift there only in the last stage preceding dissolution. This provision for paupers of the island is supplemented by an outdoor relief system under the supervision of the Police Department. Lower down on the shore itself is the Yaws Asylum, with a daily average of about 46·42; and here also, in addition to yaws patients, two or three lepers are housed, for whom separate accommodation has not yet been provided. There are visiting stations at various points where medical officers attend regularly on fixed days, and are available to those who require their services. At Castries the medical officer in charge of the Victoria Hospital dealt with a very numerous out-patient *clientèle* from the town at the hospital dispensary, but this has now been changed and a separate dispensary established in the town, which is a preferable arrangement.

THE REMOVAL OF TATTOO MARKS.

R. B. (M.D.) writes:—I have a patient, a girl, who some time ago was tattooed by her mother on the face. The friends are now anxious to get the marks erased. Can you, or your readers, inform me how this can be done, and oblige?

*** There are several methods by which tattoo marks may be removed, and the choice of the method to be employed depends on the character of the marks. If they are small and scattered the electric needle is best suited for removing them; if they are larger a skin punch will often prove useful, while if they are very extensive some form of skin-grafting will be the most suitable method to employ. It is obvious that much skill is required in the use of these methods to prevent the replacement of one form of disfigurement by another. When the operation is carefully done the results are very good. Caustics are, on the whole, unsuitable, and the scars produced are not sightly.—ED. L.

A TUBERCULOSIS CIRCULAR.

AN instructive circular on tuberculosis prevention comes to us in the shape of *Bulletin*, No. 9, Vol. II., of the Tuberculosis League of Pittsburgh, U.S.A. The circular gives reasons for stating that in order to prevent tuberculosis we must take care of our children from the cradle through childhood, details the statistics of tuberculosis in childhood, and offers a series of succinct and pithy one-line answers to the questions, Where must these children's universal infection be handled? What are the weaknesses in the home, in orphanages and institutions, in schools, in Sunday schools, in playgrounds, and in hospitals? and How can these weaknesses be reached in each of the foregoing environments? It urges the formation of a series of hospital schools in which the sick tuberculous children from the public schools can be helped to regain health while continuing their education, and of a series of open-air schools for anæmic and backward children. It also details the things accomplished by the league as follows: the establishment of an open-air school, a hospital school, a babies' dispensary, and an orphanage open-air school. A plan for the systematic education of school children on tuberculosis which was devised by the league received the second prize at the International Congress, and has been widely copied.

STRAITS SETTLEMENTS' HEALTH REPORT.

THE annual report on the Straits Settlements for the year 1911 (not presented to Parliament until February, 1913) states that the population of the colony at the date of the census was 711,951. The death-rate in 1911 was 46·45 per 1000 of the population, as compared with 41·88 in 1910 and 37·40 in 1909. The birth-rate in 1911 was 25·38 per 1000, compared with 27·55 in 1910. There were 393 deaths from small-pox, 343 from cholera, and 32 from plague. The deaths from beri-beri were 2056, as compared with 1737 in the previous year. The use of cured rice in the different institutions of the colony has lessened the death-rate from this disease.

Phthisis increased in a markedly unhealthy year, there being 2907 deaths returned from this disease, compared with 2571 for 1910, 2659 in 1909, and 2988 in 1908. It must be remembered (the report points out) that with greater facilities for travelling in the Straits more decrepits find their way into the big towns to increase the death-rate, and the population is shown to have increased 139,702 in the past ten years. Improvement in the death-rate from this disease is hoped to be shown in a few years when time is given for the sanitary conditions of the bigger towns to improve by the gradual construction of back lanes, improved drainage, more cubic space and less overcrowding, more air and sunlight, &c.—matters now being taken in hand by the municipalities.

Dysentery was the cause of 2035 deaths, as against 1329 in 1910 and 1211 in 1909. A large addition to the water-supply of Singapore has but lately been completed; improvement of the water-supply

of other districts is under consideration, and it is trusted that progress on these lines may tend to lessen the incidence of the disease. There was widespread increase of malaria throughout all the Settlements—an increase which has been steady and progressive for several years. The death-rate from this disease also shows corresponding increase, a conspicuous feature being the number of cases of a malignant type. The deaths from malaria in all Settlements (excluding Labuan) were 5769 for the year, compared with 3245 in 1910 and 2589 in 1909. A crusade against this disease is being undertaken, but some years must elapse before any very tangible results are likely to be seen. An Estate Labourers' Protection of Health Ordinance has been passed which should lead, when in full work, to some reduction in the death-rate, more especially from malaria and dysentery, for it is undoubted that many broken-down coolies from estates proceed to the nearest town, where they not only increase the death-rate but are also a source of danger to those around them. The accommodation in all hospitals was taxed to the utmost throughout most of the year. The total number of admissions was 44,026, as compared with 32,979 in 1910 and 27,543 in 1909. The rate of mortality in 1911 was 13·04 per cent. (as against 12·69 per cent. in 1910) of the total cases treated. The number of inmates in the leper asylums increased from 440 to 471, and there were 173 deaths.

The mean temperature of the air in Singapore was 81·3°F, in Penang 81·7°, in Province Wellesley 81·4°, in Malacca 80·0°, and in Labuan 81·6°. The rainfall was 92·72 inches in Singapore, 99·82 in Labuan, 85·70 in Penang, 68·65 in Wellesley Province, 67·44 in Malacca, and 82·2 in Dindings. The prevailing direction of the wind changes with the N.E. and S.W. monsoons, the former blowing from November to April, and the latter from May to October.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

Medical Diary for the ensuing Week.

SOCIETIES.

ROYAL SOCIETY, Burlington House, London, W.

THURSDAY.—Dr. W. Watson: On the Luminosity Curves of Persons having Normal and Abnormal Colour Vision.—Prof. J. C. McLennan: On a Fluorescence Spectrum of Iodine Vapour (communicated by Sir J. Larmor).—Dr. W. Wahl: The Relation between the Crystal-symmetry of the Simpler Organic Compounds and their Molecular Constitution. Part I. (communicated by Sir J. Dewar).—Mr. J. J. Manley: Of the Purification of Phosphorus Pentoxide for Use in High Vacua (communicated by Prof. J. H. Poynting).

ROYAL SOCIETY OF MEDICINE, 1, Wimpole-street, W.

MONDAY.

SPECIAL MEETING OF FELLOWS OF THE SOCIETY: at 5 P.M.

Discussion:

On Alimentary Toxæmia: its Sources, Consequences, and Treatment. (Second Meeting.)

The discussion will be re-opened by Mr. J. B. Lawford and continued by Prof. W. E. Dixon, F.R.S., Dr. J. C. G. Ledingham, Dr. James Galloway, Dr. A. Mantle, Dr. A. F. Hertz, Mr. J. G. Turner, Mr. Frank Coleman, Mr. S. H. Browning.

The Third Meeting will be held on Monday, April 21st, at 5 P.M., when the discussion will be re-opened by Mr. Lockhart Mummery.

TUESDAY.

SECTION OF THERAPEUTICS AND PHARMACOLOGY (Hon. Secretaries: H. H. Dale, W. Langdon Brown): at 4.30 P.M.

Discussion:

On the Use of Salvarsan and Neosalvarsan in Diseases other than Syphilis (to be opened by Dr. Byrom Bramwell: Use in Pernicious Anæmia).

Dr. Parkes Weber, Dr. William Hunter, Dr. T. J. Horder, and Mr. J. E. R. McDonagh will take part.

The Hon. Secretaries will be glad to hear from Fellows of the Society or Members of the Section who can contribute to the discussion.

GENERAL MEETING OF FELLOWS at 5 P.M.

Election of Candidates for Fellowship.

THURSDAY.

SECTION OF BALNEOLOGY AND CLIMATOLOGY (Hon. Secretary—Chas. W. Buckley): at 5.30 P.M.

Papers:

Dr. Edgecombe: The Significance, Treatment, and Prognosis of High Blood Pressure.

Dr. A. Mantle: The Undesirability in Confirmed Cases of High Blood Pressure of actively applying Therapeutic Means to Reduce it.

SECTION OF DERMATOLOGY (Hon. Secretaries—Wilfrid Fox, J. M. H. MacLeod): at 5 P.M.

Cases:

Dr. Whitfield: An Unusual Case of Papulo-necrotic Tuberculide. And other Cases.

SPECIAL EVENING MEETING: at 8.30 P.M.

Subject:

Malignant and Doubtfully Malignant Tumours of the Skin (with drawings, lantern slides, and microscopical sections.)

SECTION OF NEUROLOGY (Hon. Secretaries—Wilfred Harris, T. Grainger Stewart): at 8.30 P.M.

Dr. H. Howard Tooth, C.M.G.: Gumma Cerebri—Results of Treatment, Medical and Surgical. Lantern Demonstration illustrating Histological Features.

Dr. F. E. Batten: Cerebral Symptoms in a Bull-dog associated with Lymphocytic Infiltration of Vessels and Membranes of the Brain and Cord.

Dr. James Collier and Dr. S. A. K. Wilson: The Clinical and Pathological Data of a Case of Dermato-myositis with Intense Muscular Atrophy in the Cervical Region and Disease of the Thyroid Gland.

FRIDAY.

SECTION OF OTOLOGY (Hon. Secretaries—H. J. Davis, G. J. Jenkins): at 5 P.M.

Discussion:

On Functional and Simulated Affection of the Auditory Apparatus (to be opened by Mr. T. Mark Hovell).

SECTION OF ANÆSTHETICS (Hon. Secretaries—H. J. Scharlieb, C.M.G., H. E. G. Boyle): at 8.30 P.M.

Annual General Meeting.—Election of Officers and Council for Session 1913-1914.

SECTION OF ELECTRO-THERAPEUTICS (Hon. Secretaries—Cecil R. C. Lyster, G. Allpress Simmons): at 8.30 P.M.

Consideration of the Use of X Rays in the Diagnosis of Gastric Ulcer.

Papers:

Dr. A. C. Jordan: Gastric Ulcer.

Dr. A. E. Barclay: The Etiology of Gastric Ulcer.

MEDICAL SOCIETY OF LONDON, 11, Chandos-street, Cavendish-square, W.

MONDAY.—8 P.M., Clinical Cases and Pathological Specimens will be exhibited by Dr. F. P. Weber, Mr. E. M. Corner, Mr. C. V. Anderson, Dr. J. L. Bunch, Dr. E. H. Shaw, Dr. Jewesbury, Mr. A. E. Barker, and others.

CHARITY ORGANISATION SOCIETY, Denison House, Vauxhall Bridge-road, S.W.

MONDAY.—4.30 P.M., Special Meeting of the Council. Mr. H. D. Scott and Mr. W. Buckley: The Best Means of Increasing the Supply of Pure Milk.—Dr. R. Dudfield: The Supply of Suitable Milk for Infants.

LONDON DERMATOLOGICAL SOCIETY, St. John's Hospital, 49, Leicester-square, W.C.

TUESDAY.—4.30 P.M., Demonstration of Pathological Specimens. Cases sent for Consultation. Demonstration of Clinical Cases by Dr. Dockrell, Dr. Bunch, Dr. Sibley, Dr. Galbraith, and Dr. Griffith. 5.15 P.M., Discussion on Electrical Procedures in Diseases of the Skin and Mucous Membranes (opened by Dr. W. K. Sibley).

CHELSEA CLINICAL SOCIETY, Club Rooms of the Medical School, St. George's Hospital, S.W.

TUESDAY.—8.30 P.M., Papers:—Dr. V. B. Orr: The Work of a Tuberculin Dispensary. Dr. H. Dally: The Use of Tuberculin in Diagnosis and Treatment. Followed by a Discussion in which Dr. Barcroft, Dr. L. A. Clutterbuck, Dr. F. N Griffiths, Dr. C. McClure, and others will take part.

CHILD STUDY SOCIETY, LONDON, Royal Sanitary Institute, 90, Buckingham Palace-road, S.W.

THURSDAY.—7.30 P.M., Prof. J. A. Green: The Backward Child in the Ordinary School.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, Lincoln's Inn Fields, W.C.

MONDAY.—5 P.M., Mr. Shattock: Specimens illustrating Hypertrophy. (Museum Demonstration.)

FRIDAY.—5 P.M., Prof. Keith: Specimens illustrating Congenital and Acquired Deformities of the Foot. (Museum Demonstration.)

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC, 22, Chenies-street, W.C.

TUESDAY.—4 P.M., Dr. E. B. Smith: Clinique (Medical). 5.15 P.M., Lecture:—Mr. R. Lake: Acute Mastoiditis.

WEDNESDAY.—4 P.M., Mr. R. Howard: Clinique (Surgical). 5.15 P.M., Lecture:—Mr. E. Clarke: Abnormal Conditions of the Healthy Fundus Oculi, contrasted with Diseased States (illustrated by lantern slides).

THURSDAY.—4 P.M., Mr. J. Cunning: Clinique (Surgical). 5.15 P.M. Lecture:—Mr. E. M. Corner: Alimentary Intoxication.

FRIDAY.—4 P.M., Mr. J. Cunningham: Clinique (Eye).

POST-GRADUATE COLLEGE, West London Hospital, Hammersmith-road, W.

MONDAY.—10 A.M., Diseases of Women. 2 P.M., Medical and Surgical Clinics. X Rays. Operations. 2.30 P.M., Diseases of the Eye.

TUESDAY.—10 A.M., Gynæcological Operations. 2 P.M., Medical and Surgical Clinics. X Rays. Operations. Diseases of the Throat, Nose, and Ear. 2.30 P.M., Diseases of the Skin.

WEDNESDAY.—10 A.M., Diseases of Children. Operations of the Throat, Nose, and Ear. 2 P.M., Medical and Surgical Clinics. X Rays. Operations. Diseases of the Eye. Diseases of Women.

THURSDAY.—2 P.M., Medical and Surgical Clinics. X Rays. Operations. Orthopædics. 2.30 P.M., Diseases of the Eye.

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LONDON SCHOOL OF CLINICAL MEDICINE, Dreadnought Hospital, Greenwich.

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WEDNESDAY.—Out-patient Demonstrations: 10 A.M., Dr. F. Langmead: Medical. Surgical. 11 A.M., Mr. R. B. Bickerton: Eye.——2 P.M., Mr. L. V. Cargill or Mr. Choyce: Operations. 2.15 P.M., Dr. F. Taylor: Medicine. 3.15 P.M., Mr. Cargill: Eye Clinique. 4.30 P.M., Mr. C. C. Choyce: Surgery. 2.15 P.M., Special Lecture:—Dr. F. Taylor: Enlargement of the Spleen.

THURSDAY.—Out-patient Demonstrations:—10 A.M., Dr. Singer: Medical. Mr. H. Curtis: Surgical. 12 noon, Mr. G. N. Biggs: Throat, Nose, and Ear.——2 P.M., Mr. R. Carling or Mr. W. Turner: Operations. Dr. A. Davies: Pathological Demonstration. 3.15 P.M., Dr. R. Wells: Medicine. 4.30 P.M., Special Lecture:—Mr. Wm. Turner: Psoas Abscess.

FRIDAY.—Out-patient Demonstrations:—10 A.M., Dr. G. Holmes: Medical. Mr. Cole: Surgical. 12 noon, Dr. H. MacCormac: Skin.——2 P.M., Mr. L. McGavin: Operations. 2.15 P.M., Sir John Rose Bradford; Medicine 3.15 P.M., Mr. L. McGavin: Surgery.

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ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City-road, E.C.

Course of Lecture-Demonstrations on Diseases of the Chest, with Special Reference to Tuberculosis (including a Tuberculin Course):—

MONDAY.—4.30 P.M., Mr. A. Evans.
FRIDAY.—4.30 P.M., Dr. Phear.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN, 49, Leicester-square, W.C.

THURSDAY.—6 P.M., Dr. M. Dockrell: Syphilis and Tuberculosis as Modifying Factors in the Diagnosis and Treatment of Eruptions of the Skin.

ROYAL INSTITUTION OF GREAT BRITAIN, Albemarle-street, Piccadilly, W.

TUESDAY.—3 P.M., Prof. W. Bateson: The Heredity of Sex and some Cognate Problems. (Lecture I.)
FRIDAY.—9 P.M., Dr. T. M. Lowry: Applications of Polarised Light (with experiments).

ANCOATS HOSPITAL, Manchester.

THURSDAY.—4.15 P.M., Dr. A. Renshaw: The Application and Interpretation of the Wassermann Reaction (Post-Graduate Clinic.)

ROTUNDA HOSPITAL POST-GRADUATE COURSES, Dublin.

MONDAY.—10 A.M., Obstetrical Lecture: The Effect of the Presentation of the Fœtus on the Management of Labour. 11 A.M., Examination of Patients and Minor Operations.
TUESDAY.—10 A.M., Major Operations. 4 P.M., Class in Gynæcological Diagnosis.
WEDNESDAY.—10 A.M., Obstetrical Lecture: Mechanical Obstacles to Delivery. 11 A.M., Examination of Patients and Minor Operations.
THURSDAY.—10 A.M., Major Operations.
FRIDAY.—10 A.M., Gynæcological Lecture: Pelvic Infection. 11 A.M., Examination of Patients and Minor Operations. 4 P.M., Class in Gynæcological Diagnosis.

For further particulars of the above Lectures, &c., see Advertisement Pages.

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(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, April 9th, 1913.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Rainfall.	Solar Radio in Vacuo.	Maximum Temp. Shade.	Min. Temp.	Wet Bulb.	Dry Bulb.	Remarks.
April 3	30·13	S.E.	...	98	57	43	43	46	Fine
,, 4	30·05	N.E.	0·13	65	53	42	42	44	Overcast
,, 5	29·88	N.E.	0·01	66	52	44	44	45	Overcast
,, 6	29·79	N.E.	...	97	56	41	42	45	Cloudy
,, 7	29·82	N.E.	...	95	50	41	41	44	Cloudy
,, 8	30·11	N.E.	...	79	51	37	39	42	Cloudy
,, 9	30·13	N.E.	...	78	48	41	41	43	Cloudy

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